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### THE ELWOOD ELEVATOR.

Elwood Elevator, built and constructed by the Harroun Elevator Company of St. Joseph, Mo., is a modern house of 500,000 bushels' storage capacity. It is located on the line of the St. Joseph & Grand Island Railway, at Elwood, on the Kansas side of the Missouri River, opposite St. Joseph.

The elevator is 154 feet long, 75 feet wide and 155 feet high. The loading-out track is covered by a shed fifteen feet wide, running the entire length of the building. The receiving and loading-out tracks are each 3,500 feet in length. There is also a coal track in connection with the boiler house.

The boiler and engine house are of brick, 56x62 feet, 22 feet high, and are separated by a brick partition. There are two horizontal tubular boilers, 66 inches in diameter and 18 feet long, supplied by the Freeman & Sons Manufacturing Company of Racine, Wis. These furnish steam to a Hamilton-Corliss Engine. The power is transmitted from the engine into the basement of the elevator by a 6-inch hammered steel shaft, from which oat clippers, separators, and countershafts are driven.

At the center of the elevator the main drive from the line shaft to the countershaft on the scale floor is made with fifteen strands of 1½-inch Ajax Rope. On this floor the various drives are made to each head pulley shaft by rope transmission. The rope for the entire job was supplied by the H. Channon Company of Chicago.

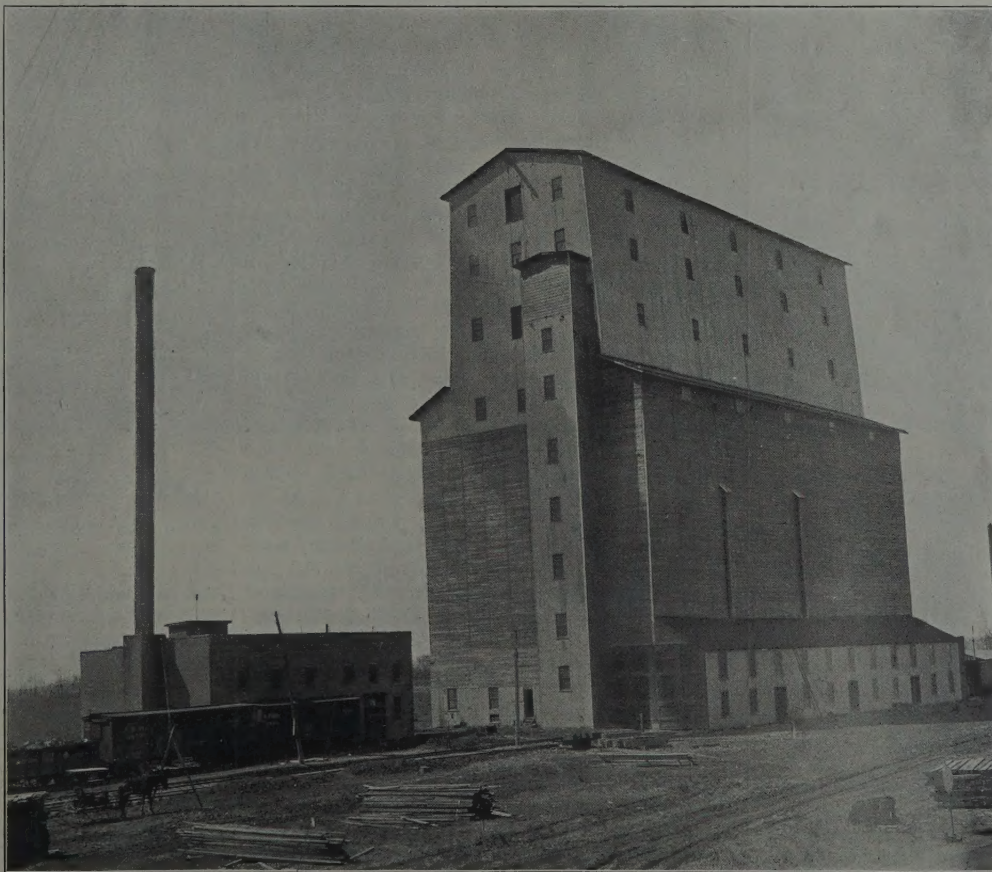
The receiving track runs through the north outside section of the elevator building. There are three receiving sinks forty-two feet apart. The receiving legs are equipped with 22-inch 6-ply rubber belts, with two rows of 10x7-in. elevator buckets. The grain is elevated vertically to the top of the

minute. While a carload of grain is being weighed and disposed of, the garner with closed valves is receiving the next carload.

The working floor, where all the cleaning machinery is set, is sixteen feet high and is three and one-half feet above the railroad track. The bin area is sixty-two feet high; the distributing story and scale story being eighteen and twelve feet high, respectively.

The side walls of the cupola are battened four feet, which adds greatly to the solidity of the building. The elevator has ninety-three bins varying in capacity from 2,500 to 10,000 bushels each. There are seven elevator legs, three for receiving and four for cleaning and shipping. Any one of the cleaning legs can draw from any or all of twenty-four bins at the same time.

There is a passenger elevator and stairway attached to the main building on the east end. The entire buildings are lighted with electricity supplied by a plant on the ground, which was installed by the American Electric Company of St. Joseph, Mo. There are 200 incandescent lights distributed over the different floors of the main building and



THE ELWOOD ELEVATOR, OWNED BY THE HARROUN ELEVATOR COMPANY OF ST. JOSEPH, MO.

building, where it is discharged into six garner of 1,800 bushels' capacity each. Directly under the garner are six Howe Scales of 1,400 bushels' capacity. The garner, which first receive the grain from the elevator, have four discharge openings, each 12x18 inches. These pass the grain from the garner to the scales at the rate of 1,000 pounds a second, and consequently a carload of 1,000 bushels or less can be transmitted from a garner to a scale in one

in the engine and boiler rooms. Over the receiving and shipping tracks are two 2,000-candle-power are lamps. The lights of the entire system are controlled from a switchboard in the dynamo room, which embraces volt meters, ampere meter, and regulating rheostat.

All of the elevator machinery was supplied by the Weller Manufacturing Company of Chicago, and is highly satisfactory in every particular. The



plans of the elevator were drawn by Messrs. F. E. Parker & Son, elevator architects of Kansas City, Mo. Mr. F. E. Parker superintended the construction of the building. The elevator is now in operation, and its architects and owners, as well as its visitors, are well pleased with the house. It cost \$80,000.

### BOSS SCOOPERS AT BUFFALO.

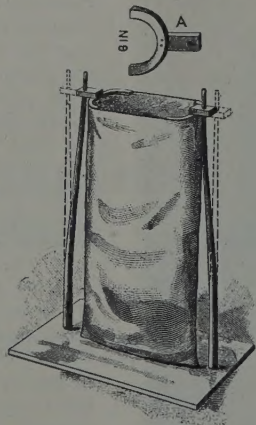
Trouble arose at the grain docks in Buffalo when the scoopers reported for work on the arrival of the first vessels of the season at the elevators. It was then discovered that no agreement had been reached between Superintendent Kennedy of the Lake Carriers' Association and President McMahon of the Grain Shovelers' Union as to the appointment of boss scoopers at the various elevators. Superintendent Kennedy contended that the boss scoopers of last year should hold over until the new appointments were agreed upon. President McMahon had new appointees on hand who, he said, had been selected by the scoopers themselves, and in several instances there was a clash between the hold-overs and the new men, which resulted in delaying the work of unloading. The controversy was submitted to President Keefe, of the International Longshoremen's Union, who decided in favor of the plan adopted by Superintendent Kennedy, of employing the last year bosses until new men could be agreed upon.

The original agreement between the Lake Carriers' Association and the Grain Shovelers' Union stipulated that the Union should select boss scoopers, who should be approved by the superintendent, and that in case of any disagreement the point at issue should be referred to President Keefe of the International Union.

The difficulty was finally settled on April 28 by Secretary-Treasurer Henry C. Barter of the International Longshoremen's Association, acting under power of attorney from President Keefe. After careful scrutiny of the men selected by the union he appointed 22 out of 24 of the union candidates and two of those chosen by Superintendent Kennedy. No further trouble on this score is anticipated.

### CONVENIENT BAG-HOLDER.

A bag-holder is a convenience wherever grain, seed or mill products are handled, and a "handy" man tells how he made a satisfactory article: Procure a piece of two-inch plank 30 inches long, and as wide as you can get. Bore two 1½-inch holes in the plank 24 inches apart. Then get two sticks 3 feet 9 inches long, of some tough wood—

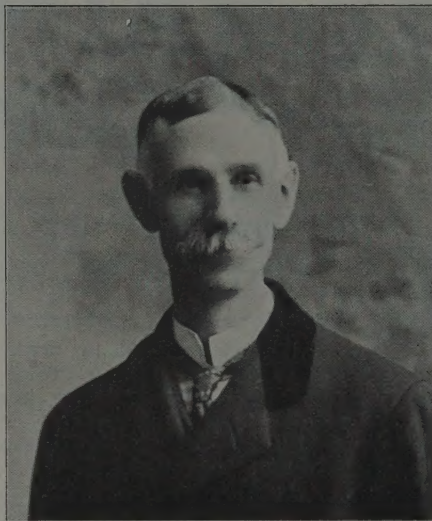


green poles will do—which should be about as large as a man's wrist. Shave these sticks to fit into the holes in the plank; and shave about 10 inches of the upper ends so they will fit tightly into a ¾-inch hole. Now make two blocks of hardwood 4½ inches long and 2 inches square. Bore a ¾-inch hole in each block near the end. Set the compass for a 6-inch circle and mark off two half circles on an inch board; then saw them out with a compass saw, and nail one of these circular pieces on each block, close to the end, as shown at A. These circular pieces should be 1 inch thick each way, and they should have about three small lathing-

nails left sticking out ¼ inch to keep the bag from slipping off. It is the spring of the two long sticks that holds the bag tight. The blocks can be slipped up or down, for bags of different lengths.

### FRED FAULKNER.

It is said somewhere—and we would attribute the saying to sacred writ were it not from the fear that some discursive theologian might make animadversion upon our temerity—that the servant is not greater than his lord. It is a true saying and worthy of all acceptance. And yet the servant is often the lord's equal. At any rate, if you have a lord occupying the pinnacle of perfection in his line, and the servant dwelling in the same state of proficiency in his, then you have an equilibrium. The



FRED FAULKNER.

lord is great, the servant is great, and they two, in that they occupy the highest place in their respective circles, are equal. For things that are equal to the same thing are equal to each other.

It is not without reason that we have prefaced an article upon Mr. Fred Faulkner with the above prolog. For he is a traveling representative in Iowa, Southern Minnesota and Southeastern Dakota for the W. R. Mumford Co. of Chicago, a well-known commission house that occupies a position among the first grade on the Chicago Board of Trade, as does also its representative, Mr. Faulkner, among the fraternity of traveling salesmen.

Mr. Faulkner is a Scotchman and embraces in his character the best Scotch characteristics, in which shrewdness, combined with strict honor and honesty, forms no small part. The people of the Northwest among whom he travels have learned to respect his views and place confidence in the strict fulfillment on his part of all his business obligations. In conversation he is affable, his manner is winning, and in the school of rushing consignments of grain to one of the four branches of the house of W. R. Mumford Co., either Minneapolis, St. Louis, Milwaukee or Chicago, he has a degree following his name embracing at least half the letters of the alphabet. He is a firm believer in the doctrine that in consigning his grain the country dealer makes more money in the long run than when he accepts the postal card bid, and he undertakes to substantiate his views by facts when the occasion requires.

Mr. Faulkner enjoys his life on the road and takes pleasure in so often meeting with his friends. That the admiration is mutual is shown by the large volume of business that stands to his credit in the home company.

The increase of wheat culture in Texas is illustrated by the record at Temple. Four years ago the entire crop of that section would not have fed the people for ten days. Two years ago the crop was about equal to the local needs; while of the last crop there was a large surplus. This year a crop is expected double that of 1899.

### BUFFALO POOL COMPLETED.

The Western Elevating Association of Buffalo met on April 23 and formally agreed upon its pool for the present year. Officers were elected as follows: Geo. T. Sowerby, president; Edward Mitchell, vice-president; P. G. Cook, secretary-treasurer; G. L. Douglass, G. T. Sowerby, E. T. Evans, E. Michael, Spencer Clinton, A. J. Wheeler, Joseph Deuel, W. C. Farrington and Spencer Kellogg, executive board. The operation of the pool begins by agreement at April 1. The pool takes in all elevators in good working condition.

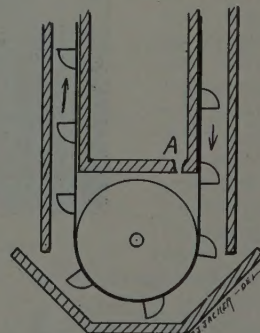
The operation of the pool last year was entirely satisfactory to western shippers. Its charges were reasonable and uniform, and, contrary to the conditions of 1898, there was prompt unloading service, which was gratifying to the vesselmen. There were last year five classifications of elevators, as follows, with the percentages allowed each class: Class 1—Dakota, Coatsworth, Electric, Niagara, Marine, Kellogg, Eastern and Frontier elevators, 37 per cent. Class 2—Northern, Export, Erie and Terminal elevators, 27 per cent. Class 3—Wilkeson, Union, Evans, Ontario, Exchange and Wheeler elevators, 10 per cent. Class 4—Wells and Bennett elevators, 10 per cent. Class 5—City Elevator, 16 per cent. The classification this year is substantially the same, only two elevators, the Dakota and Wheeler-Ontario, being undecided upon at April 23. Their owners held out for a better rating, and the case was referred to a committee composed of Messrs. Evans, Douglass and Cook, with power to act. Terms for the use of steam shovels were arranged to the satisfaction of all interested; but they are not made public. It is rumored that the rate agreed to is \$1.20 per 1,000 bushels, which is the amount granted by the Lake Carriers' Association.

The steam shovel situation is a curious one. The law allows the elevators to charge only actual expenses for shoveling to the elevator leg. This is estimated at not to exceed 30 cents per 1,000 bushels with steam shovels, yet the lake carriers allowed \$1.30 to the elevators last year, on the ground that, while the expense of operating the shovels is actually only 30 cents per 1,000 bushels, nevertheless the use of the shovels so hastens unloading that the vessel owners can afford to pay the maximum amount named, and thus get a more speedy discharge of cargo. While this charge was illegal, nevertheless the "devil was beaten around the bush" by the elevators leasing the shovels to the shoveling contractor. Now, however, since the contract system of shoveling has been abolished, some new device had to be invented. It is assumed such a valuable detail has been developed, but it has not been explained by the "town crier," for obvious reasons.

### APPLYING OIL TO ELEVATOR BELTS.

BY T. R.

A hole bored in the elevator at the point marked "A" in the accompanying sketch will prove to be handy for applying belt oil, which is almost a neces-



sity where you are pulling a conveyor. For boring the hole use a quarter-inch bit and ream funnel shape with a small knife-blade. When not using the hole may be stopped with a plug that can easily be removed.



## DYNAMITERS ON THE WELLAND CANAL.

On Saturday night, April 21, about 7:30 o'clock, two mysterious explosions were heard in the town of Thorold, Ont. The reports were plainly heard in Port Dalhousie, eight miles away. It was soon discovered that an attempt had been made to destroy Lock No. 24 on the new Welland Canal at Thorold. The attempt was not successful, as the lock gates were only slightly damaged, but the force of the explosion was terrific, as shown by its effect on surrounding property. The windows in all the buildings near the lock were broken and goods were hurled from the shelves of a near-by store. Evidently an amount of dynamite or other explosive sufficient to have wrecked the gates was used, but it was not skilfully placed, and accordingly did more damage to neighboring buildings than to the lock gates.

Just previous to the explosions two men were seen running toward the lock gates, each having a

of this supposition soon became evident, and an inquiry into the matter by the state department at Washington exonerated the grain scoopers from all blame. The real responsibility for the plot remains a mystery.

## COTTONSEED ELEVATOR AND CONVEYOR.

In the March number of the "American Elevator and Grain Trade" there was an extended description of a cottonseed elevator and conveyor, constructed for the Union Oil Company of New Orleans for handling cottonseed from river craft into the mill at Gretna. Reference to article mentioned will disclose the mechanical difficulties of the situation, in addition to those inherent to the material itself.

One of our illustrations herewith shows the marine leg, or river end, of the belt conveyor, running on a trestlework along the wharf under the roof of the mill. It handles cottonseed in bulk

## GULF PORTS EXPORTERS.

The Gulf Ports Grain Exporters' Association was organized in April at St. Louis with H. F. Hall, of Hall & Robinson, Kansas City, as president; Fred C. Orthwein, of the William D. Orthwein Grain Company, St. Louis, as secretary and treasurer, and William Steude, of D. R. Francis & Bro.; Fred C. Orthwein and William J. Orthwein, of Chas. F. Orthwein's Sons, as executive committee. Exporters of New Orleans, Galveston, Chicago, Atchison and Topeka, Kan., as well as those of Kansas City and St. Louis, are eligible to membership. In addition to the firms named above, the Richardson Grain Company of Chicago and Kansas City, W. L. Green Commission Company, J. E. Hall Commission Company and J. H. Teasdale Commission Company of St. Louis, and Robinson Grain Company and Greenleaf-Baker Grain Company of Kansas City are mentioned as members. The headquarters of the Association will be at St. Louis.

The only statement of the objects of the Associa-



MARINE LEG OF COTTONSEED ELEVATOR AND CONVEYOR.

canvas covered valise. One man went to the head gates and the other to the foot gates, and taking ropes from their pockets lowered the valises to the water's edge, adjusted and lighted the fuses, and ran off across an open field to the road. They had scarcely disappeared before the explosions were heard.

Suspicion at once fell upon two men who had been staying at the Dolphin House, Suspension Bridge, N. Y., for several days previous to the explosion. They were found by the police and taken into custody. They gave their names as John Nolin and John Walsh. Nolin and Walsh had been seen to cross the bridge frequently to meet one Karl Dullman, who was at the Roslie House in Niagara Falls, Ont. Dullman also was taken into custody soon after the explosion occurred. All the prisoners took their arrest coolly and engaged counsel to defend them. They were arraigned before the magistrate and remanded to jail without bail to await trial.

Several theories were advanced as to the evident plot to destroy the Welland Canal. It was thought by some to be the work of Fenians. Others saw in it a plan to cripple the canal in behalf of the grain interests of Buffalo and against the Conners syndicate, and it was freely charged that the grain scoopers of Buffalo were in the plot. The absurdity

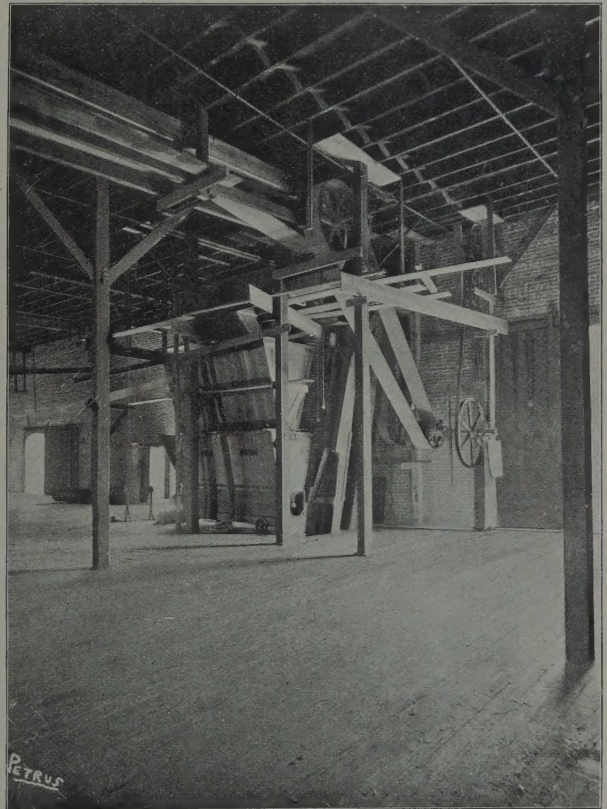
from barges and delivers it into the warehouse of the mill without rehandling. The marine leg can be elevated or lowered to meet the rise and fall of the river. The belt conveyor, several hundred feet in length, conveys the seed to the warehouse and also furnishes the power to drive the marine leg.

The other picture shows the delivery end of the mill, within the warehouse of the oil mill, and also the method of driving. The conveyor may be shut down when desired without stopping any other machinery, by means of the Weller Improved Friction Clutch, shown in illustration.

This interesting conveyor plant, which is, perhaps, the most successful ever built for this purpose, especially where the point of delivery stands so far back from the river, was furnished by the Weller Manufacturing Company of Chicago.

The prison supply of sacks in Washington will be only about 1,049,971 at September 1. This is only 43 per cent of the total number applied for by farmers at April 1.

C. A. King & Co. of Toledo say: "The clover crop this year was short and inferior in quality." The receipts for season to April 1 were 130,600 bags, against 181,400 bags same date 1899, and 72,000 bags in 1898.



DELIVERY END OF COTTONSEED ELEVATOR AND CONVEYOR.

tion made public is an interview by a St. Louis paper with William R. Kennett, president of the Merchants' Exchange and secretary of the D. R. Francis Commission Company, who gave the following reasons for the formation of the Association:

"It is for the purpose of protecting the exporters of the country against the arbitrary and constantly changing regulations of the maritime association, which is composed of the agents of the various shipping lines leaving the ports of the United States. European buyers are so exacting in their demands that they take advantage of the slightest technical flaw in their contracts or bills of lading, and sometimes cause great loss to the exporter, who has acted in good faith in making his shipment. It is to forestall the commission of such errors in contracts on the part of the maritime agents and to secure a uniformity of rules regarding shipments from all ports, that the Association was formed."

The legal articles of association state specifically that it is formed to protect the exporting interests of the members and to advance the equitable principles of trade. Its object is also to maintain uniformity in commercial and exporting usages, and to avoid and adjust all controversies which may arise between its members in any business relating to the export trade.



## GREAT NORTHERN STEEL ELEVATOR AT WEST SUPERIOR.

BY D. G. DOUBLEDAY.

The new steel elevator of the Great Northern Railway Company, now nearing completion on St. Louis Bay in West Superior, Wis., will be when finished the largest elevator in the world, and not only does it have an interest due to its magnitude and cost, but also from the fact that it will be the only elevator of its particular kind in existence. The structure is entirely of steel above the founda-

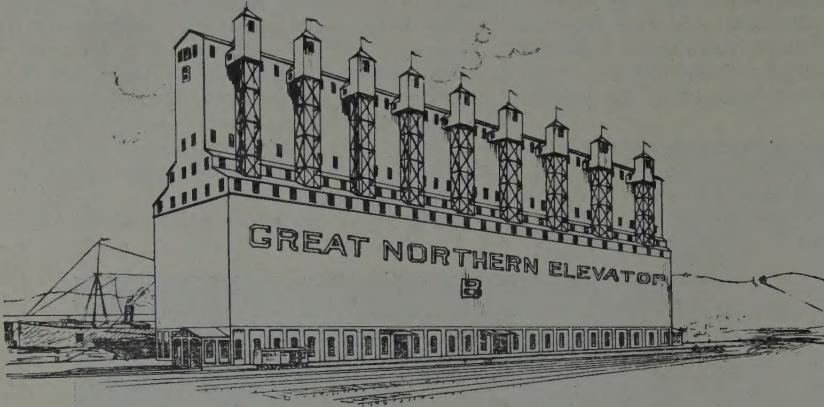
370 feet, is constructed of Portland cement concrete on a foundation of 4,500 piles. The cost of the foundation alone was \$85,000. The entire length of the elevator is 330 feet; width, 128 feet; height, 235 feet, being 70 feet higher than any other working elevator. When Mr. Bellinger places the flagstaff upon its tower it will reach a higher altitude than the famous Duluth hills, and be the highest point at the Head of the Lakes.

The capacity of the elevator is 6,000,000 bushels, and the interior will be arranged for the storage of all kinds of grain; in so many words, is will be

within the interior for supporting the parts carrying heavier machinery.

Every corner of the bins has a pillar support. The depth of bins is 100 feet. When completed and in operation over 20,000,000 pounds of steel will have been used in the construction. The estimated cost is \$2,000,000.

The power plant has 2,500 horse power, electric, and is the largest power plant in the Northwest. The engines furnishing power are distributed as follows: Vertical Cross-Compound Buckeye Engine, of 1,200 horse power; one horizontal Cross-Buckeye Engine, 550 horse power; one Buffalo Vertical Steeple Compound, 150 horse power; one Tandem Compound, 750 horse power. The condensers for



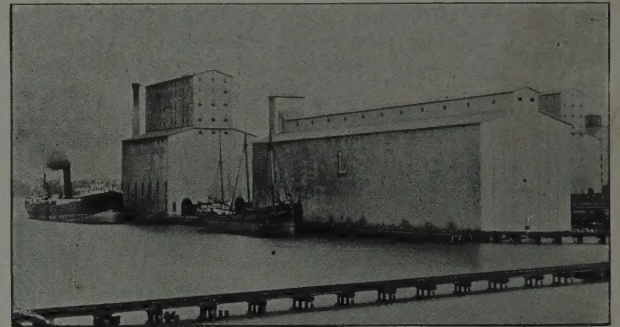
GREAT NORTHERN NEW STEEL ELEVATOR, WEST SUPERIOR.  
From Designer's Plan Drawings.

tion, and, in the words of its designer, "It will have not a sliver in it."

In one sense the elevator at Buffalo was taken as a model, that is, in regard to construction material, but only in that regard, as the primary feature in the Great Northern house will be a departure from the original plans of the house at Buffalo. To quote the designer, A. D. Bellinger, "The round bins have not met the requirements and experience has taught that they have occa-

a general custom house. The storage bins are 13½ feet square. Tests have been made of grain pressure in this particular kind of bin at the University of Engineers in England, and by the engineering corps of the Great Northern Railway, with satisfactory results.

The elevator has a basement floor and a main floor, where all cleaning will be done. The unloading capacity is 253 cars per 10 hours. The main elevator has a capacity of 3,400,000 bushels, and



SUPERIOR TERMINAL ELEVATOR CO.'S ELEVATOR, WEST SUPERIOR.  
Cargill System. Capacity, 2,500,000 Bushels.

the plant are of the E. P. Allis pattern and were made by Stillwell-Bierce & Swift-Vaile Company.

The engine room is 75x53 feet and is provided with a Whiting Equipment Company's Traveling Crane, with a weight capacity of 26,000 pounds. It is arranged to carry that weight anywhere about the room.

The boiler plant is 40x70 feet and consists of four steel boilers, 72 inches in diameter, by 18 feet long, in special settings, designed by Mr. Bellinger.



GRAIN INSPECTION YARDS OF GREAT NORTHERN RAILWAY COMPANY AT WEST SUPERIOR, WIS.

sioned a great waste of space; that bins of a right angled form would prove more satisfactory." For that reason, a weighty one in elevator construction, the Great Northern Elevator will be provided with right angled bins, thus saving an immense amount of space lost by the original plans of the Buffalo house.

About two years ago the Great Northern Company decided to build the new steel structure, its other elevators at West Superior being insufficient to handle its constantly growing business; and the project was turned over to Mr. Bellinger with instructions to go ahead with the project.

The foundation for the mammoth structure, 130x

the general capacity of the entire elevator plant will be further increased by the addition of steel storage tanks surrounding the main floor. Their diameter will be 50 feet and height 65 feet, with estimated capacity of 2,600,000 bushels; thus making the total capacity 6,000,000 bushels. The cupola above the bins will be six stories.

Upon the foundation rest ten rows of steel pillars running lengthwise, being a uniform distance apart and supporting the corners of the bins. Running crosswise are twenty-eight rows of pillars, thus making 280 steel pillars supporting the bins; besides these, other steel pillars of combination plates of heavier construction material are disposed

The largest concrete boiler foundation in the United States is found beneath these boilers. As an accessory equipment, there are three horizontal water tube boilers, of 320 horse power each. The dust feeder is automatic, and so designed that when the dust is not being consumed it accumulates in a reservoir.

The statement that the management of the Great Northern Railway Company turned over the entire building of the plant to Mr. Bellinger reflects the confidence of the road management in his capacity to handle a great undertaking and likewise shows the great versatility of the designer's knowledge of mechanics. The plans were drafted along the



lines of practicability rather than upon theoretic lines; and since the new structure was started several ideas incorporated in its plans have been imitated in other elevators now building at the head of the lakes, notwithstanding the fact that the builders condemned the original plans of the Great Northern house in some particulars. All the detail work of installing the machinery is under the direction of Mr. Bellinger, and it may be truthfully stated that he has been the inspiration for all ideas incorporated in the plans of both elevator and power plant.

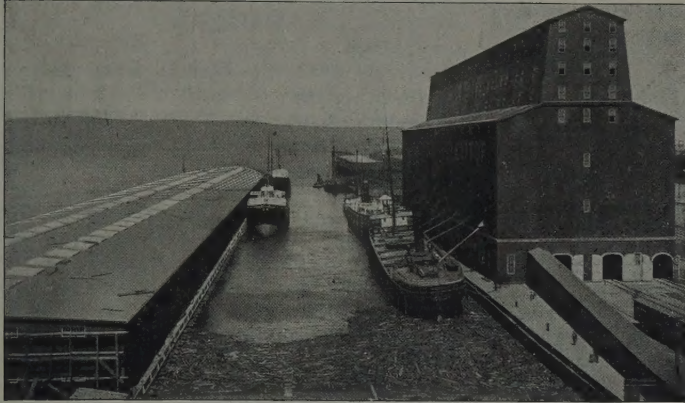
by 143 feet wide, with a total storage capacity of 2,000,000 bushels, giving the city a total elevator and warehouse capacity of about 5,000,000 bushels.

The construction of this house has already begun under the direction of Engineer Bihler of the railway company, and the company is under contract to have the house ready for use by September 1.

### THE NEW FARMERS' TRUST.

J. C. Hanley of St. Paul, known to fame as the secretary of the National Grain Growers' Associa-

Having spent some time in working out this exceedingly simple scheme for curing the troubles of the farmers, Mr. Hanley is as delighted as he is surprised to find that a European economic genius, Prof. G. Ruhland of the University of Freiburg, a professor of economics, has been led by his study of the problems of different countries, to the "same conclusion." Prof. Ruhland, Mr. Hanley tells us, "looked out upon the world and saw the farmers ruining themselves by a struggle for the markets which ever tended to grow sharper, while under all conditions the middlemen, and not the original



GREAT NORTHERN ELEVATOR "X," WEST SUPERIOR.  
Capacity, 1,500,000 Bushels.

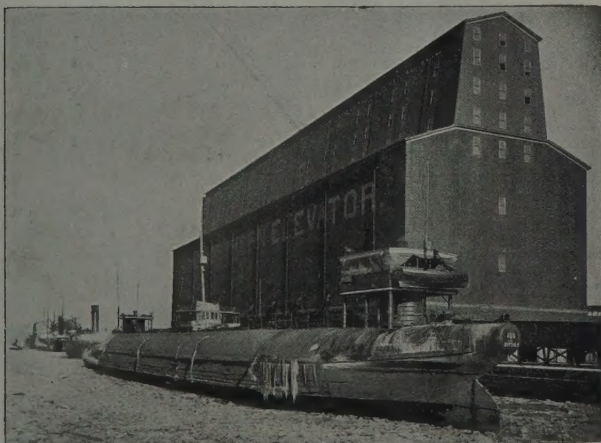
The capacity of the Great Northern system of elevators in West Superior will be 9,500,000 bushels when the new structure is finished, and the capacity of all local elevators will be 22,050,000, distributed as follows:

	Bushels.
Great Northern A and X.....	3,500,000
Great Northern Steel .....	6,000,000
Belt Line M and N.....	2,500,000
Globe Co. 1, 2, 3.....	5,000,000
Terminal K and L.....	2,500,000
Mill elevators and private houses.....	1,250,000
Chicago, St. Paul, Minn. & Omaha (new).....	1,300,000

Total ..... 22,050,000

### NEW GRAIN HOUSES ON PUGET SOUND.

On April 22 the Northern Pacific Railway Company executed contracts with three large wheat



GREAT NORTHERN ELEVATOR "A," WEST SUPERIOR.  
Capacity, 2,000,000 Bushels.

exporting firms operating at Tacoma, Wash., for the use for a long term of years of the largest wheat house on the Pacific Coast. These firms are Balfour, Guthrie & Co. of San Francisco, Portland, Tacoma and Seattle, Geo. W. McNear & Co. of San Francisco and Kerr, Gifford & Co. of Portland.

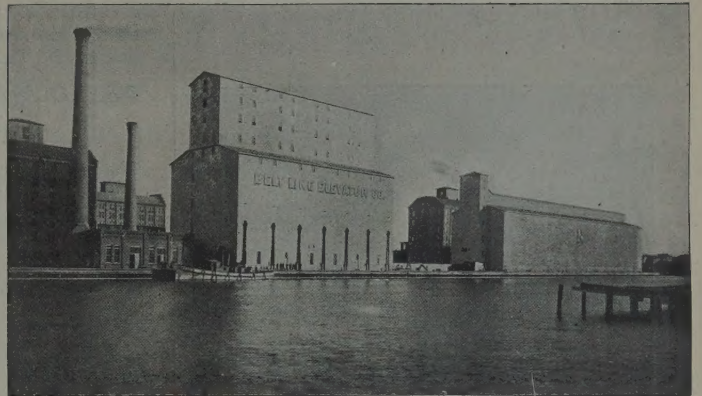
Each of these firms will have one section of a single immense warehouse. Balfour, Guthrie & Co.'s and McNear & Co.'s portions will each be 650x143 feet, with capacity of 750,000 bushels each; while that of Kerr, Gifford & Co. will be 400x143 feet, with capacity of 500,000 bushels. The three sections will be separated only by firewalls, so that all will unite to form one building, 1,700 feet long

tion and executive officer of various other farmers' organizations, is father to another scheme to raise grain prices. Mr. Hanley many months ago, it will be remembered, proposed the plan of a system of farmers' elevators, all to be tributary to a big terminal at Duluth on a piece of land owned by the state, but granted for a term of years free to the Association. With this elaborated system in operation, all middlemen's charges were to be eliminated, and the farmers made rich by throttling the elevator men. Although this was a year and a half ago, the scheme is still in the embryo.

Now Mr. Hanley proposes something else, which

producers or consumers, reaped all the benefits. I approached the problem from the purely practical point of view, yet, strange to say, we both arrived at the same conclusion. He has interested other economists, so that now we are in correspondence with the brainiest men in the leading colleges and universities of the world."

A large number of political economists and practical farmers from this country will attend the Paris conference on June 9-16, Mr. Hanley says, and there meet other delegates from all parts of the world. It will then be proposed to launch the great "Hold-Your-Wheat" trusts under interna-



BELT LINE SYSTEM OF ELEVATORS, WEST SUPERIOR.  
Capacity, 2,500,000 Bushels.



GLOBE ELEVATOR COMPANY'S SYSTEM, WEST SUPERIOR.  
Capacity, 5,000,000 Bushels.

is no less than an international agricultural trust. Mr. Hanley thinks it is just as easy for the farmers to regulate prices for grain as for the "jobbers" to regulate prices for dry goods, groceries, flour, oatmeal, etc., which he assumes the "jobbers" do, and perhaps it is. Now, he says, "My plan is to organize a world-wide trust, or union of farmers, to regulate prices, or, what is the same thing, to get them to hold their products until a certain price is paid. You would be surprised to see," he says, "how many could do this, if they would." So he proposes that the farmers shall reduce their acreage of wheat, say, 20 per cent, which would force the price of that cereal to a dollar.

tional auspices. Meantime, it is to be hoped Mr. Hanley's trip abroad will be a pleasant one and at least relieve him of brain fag.

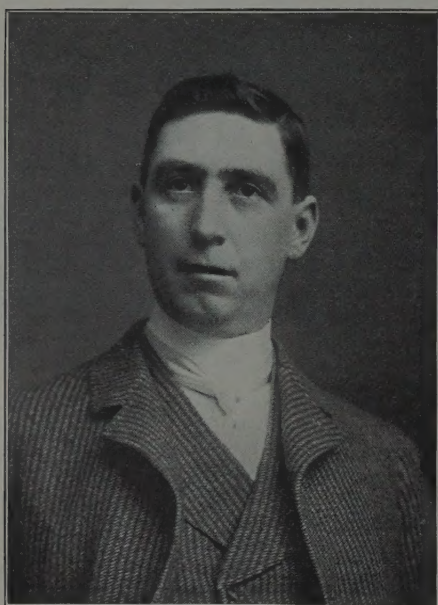
The Cragin scheme to build elevators in New York harbor, Jersey side, mentioned a month ago, is expected to reduce the average transfer charge in New York harbor from 1.68 cents, the minimum thus far, to not to exceed 1/2 cent. This would reduce the average cost (for period of several years) of carrying corn from Chicago to on-board ocean steamers at New York to 6.37 cents; or if Buffalo made the same reduction of transfer charges as in New York, to about 5 1/2 cents.



**W. R. McQUILLAN.**

The subject of our sketch, W. R. McQuillan, with Henry Heile & Sons, Cincinnati, needs no introduction to grain men of Ohio, Indiana and Illinois. If there is in those states a dealer who will confess he doesn't know "Billy" McQuillan, explanations are in order; because it's an entirely irregular condition and inconsistent, at least with Billy's well-known habit of circumspection among grain buyers, to say nothing of other people's habit of chasing a hustler just to see how he performs.

Mr. McQuillan was born in Cincinnati, but we infer that he didn't come into the atmosphere of the sometime porkopolis with a silver spoon in his



W. R. McQUILLAN.

mouth, seeing that though he is but thirty-two years old he has been in the grain business in some capacity for twenty-one of them. Ordinarily, of course, men are more deliberate in their selection of the grain business as a career. However, in 1879, at the mature age of eleven, Billy began sweeping the floors and counting empty bags at the elevator of Mullane & Co. for the munificent wage of \$1.25 per week—a salary he managed to add to somewhat by selling newspapers before and after work. He really didn't have time to get that tired feeling which afflicts so many boys nowadays; and by strict attention to the work in hand, as well as to the instructions he got from day to day in the technical side of the business, he got on so rapidly that in 1884, when sixteen years old, he was sent by his employers to Illinois to buy grain on their account. His headquarters were Springfield, where he remained for two years. He then gave up his position with Mullane & Co. to take a similar one with Timberlake & Co., with whom he remained until the firm retired from business.

Returning then to Cincinnati he formed a partnership with C. S. Maguire, the junior partner of the old firm of Mullane & Co. The firm was known as Maguire & Co., and they did a large business in grain and hay; but in 1896 he withdrew from this connection to take charge of the receiving department of the Union Grain and Hay Company. In August last he left that firm to take full charge of the grain department of the wholesale and retail receiving and shipping firm of Henry Heile & Sons of Cincinnati.

Incidental to these various connections, Mr. McQuillan has traveled extensively through the states of Ohio, Indiana and Illinois, and has an unusually wide acquaintance among grain buyers and shippers. With a personality entirely his own, a lively disposition and an exhaustless fund of humor and good nature, he is welcomed everywhere; and at the association meetings in those states, which he never fails to attend as a member, he is the soul of every social feature in connection with them. As a traveling man he has the reputation of being

chief among the hustlers—a man who distances all competitors in getting over territory and working it for all there is in it; while as a grain expert he is considered one of the first authorities in the Middle West. During the past two years he served on the directory of the Cincinnati Chamber of Commerce, an office to which he was elected by a large vote and from which he but recently retired.

Mr. McQuillan resides in the suburb of Tusculum with his wife and family of two lovely girls.

All in all, Mr. McQuillan has made his own record and deserves the success he has earned. While men don't generally nowadays get any more than they are entitled to, at least his friends will wish his good fortune to continue—just like the "iceman's."

**THE CONNERS SYNDICATE AT MONTREAL.**

The plans submitted by the Connors Syndicate to the Montreal Harbor Commissioners for elevators to be erected under the concession contract, were refused on April 26, on the ground that they did not conform to the terms of the contract. This instrument provides that the first elevator erected shall have 3,000,000 bushels' capacity, whereas the plans submitted indicate a capacity of only 1,000,000 bushels. The plan of the building is generally approved except as to its capacity.

At the meeting of the Harbor Commissioners, held on April 23, Harbor Engineer Kennedy reported to the above effect after an examination of the plans submitted to him by G. T. Smith on behalf of the Connors Syndicate. Mr. Smith explained that a detached grain storehouse of 2,000,000 bushels' capacity would be erected later, when the elevator and the storehouse being connected by conveyors would in fact constitute one elevator of 3,000,000 bushels' capacity. The elevator plan submitted was for a house 274½x90½ feet on the ground, 121½ feet high, or 191 feet to the top of the cupola. There are to be 101 bins of 9,500 bushels' capacity, and 24 of 3,200 bushels' capacity each.

The contract is explicit in its requirement that the first elevator, that on Windmill Point, shall have 3,000,000 bushels' capacity, and cost (at prices of 1899) \$1,100,000, and others later to cost \$1,500,000; and the discussion of the plan submitted brought forth the expression by the commissioners that the syndicate would be held strictly to its contract to build a house of the size named; and the commission instructed its proper officer to write the syndicate, requesting it to submit plans showing the complete drawings for the building on Windmill Point. In reply to this demand, the syndicate say the plans for this site include a "working house" and a "storage house." The working house will have minimum capacity for weighing and handling grain of 25,000 bushels per hour, and loading capacity of 60,000 bushels per hour. This system the syndicate says better utilizes the site and is more economical in operation. The commissioners were entirely satisfied with this statement of the syndicate's plans.

Meantime, about the same date, the syndicate, or Mr. Connors, issued a private prospectus giving investors the details of its plans, based on its franchise rights under the contract named above. Mr. Connors proposes to organize a company capitalized at \$4,000,000, with power to issue bonds secured by mortgage. This company proposes to buy the Connors franchise for \$3,000,000 of stock and \$1,000,000 of bonds, Mr. Connors turns over one-half (\$1,500,000) of this stock and all of the \$1,000,000 of bonds to trustees for the benefit of the new company. The remaining \$1,000,000 of stock is offered for sale at par, each subscriber getting bonds to an amount equal to his stock subscription. The proceeds of the sale of this stock are to be used in the erection of elevators, warehouses and general equipment of its plant. To provide for the future expansion of the company it is proposed to authorize a total bond issue of \$4,000,000, twenty years, at 5 per cent, but of which only \$1,000,000 is to be now issued to the syndicate as aforesaid, and which is to be distributed among subscribers of

stock; the remaining \$3,000,000 to be issued only by the corporation, as the necessities of the company may require for the enlargement of its plant. This arrangement would give Mr. Connors \$1,500,000 in stock for his services as promoter, and also enable him to control the company, which would be required to issue bonds in order to get money to carry out the contracts made by Mr. Connors, in order to hold the franchises in question, to say nothing of the barges contemplated for carrying grain to Montreal.

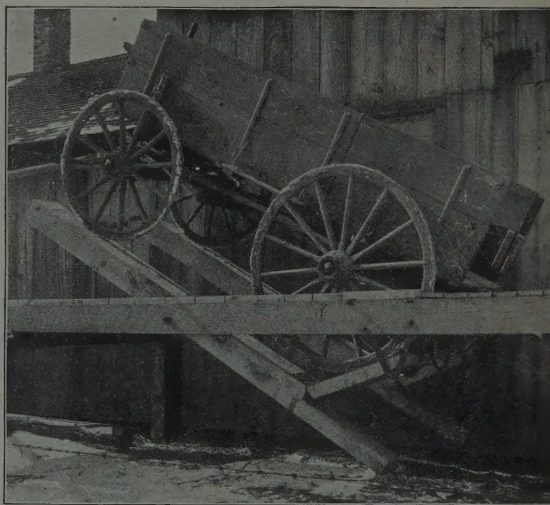
**SIMS BROTHERS' ADJUSTABLE DUMP.**

The Patent Adjustable Elevator Dump made by Sims Bros. of Paris, Ill., is so called because the wagon's own weight will adjust the dump so as to let the wagon down easy, and draw up easy, and give all wagons about the same pitch whether high or low wheeled.

This is accomplished by splitting the rear end of the dump sill so that, while the rear wheels of the wagon rest against the end of dump frame, the front wheels are lifted higher. The wagon bed is given about the same incline regardless of the size of the wheels, because the larger the wheel the further out from the dump frame must it rest on the inclined section of sill, and the further out this resting point is the lower down it is, consequently the hub of a large wheel stops at about the same height as that of a smaller wheel, and vice versa. The accompanying cut shows a low-wheel wagon on the dump.

The principle upon which this dump operates is such that the wagon, of whatever size, is let down very much easier than is usually the case. It is also easily drawn up from the dump, for the reason that, as soon as the team starts forward, the hind wheels easily move down the inclined section, causing the front wheels to move forward on dump sills until the wagon almost raises the dump by its own weight.

Another advantage is the great simplicity of this device. There is no machinery to fill up the dump



SIMS BROTHERS' ADJUSTABLE DUMP.

bin or get out of order. The few parts are strongly made and can be placed on all sill dumps now in use without changing trip or the pin the sills are hung on.

Elevator men who want to please their farmer friends and stop paying for damages to wagons should write to Sims Bros., Paris, Ill., for descriptive circular and price.

The Granary cemetery at Boston was established in 1660. The name was derived from the public granary which stood on the south side of the ground. Here were interred the bodies of eight of the early governors, the victims of the Boston massacre, the parents of Benjamin Franklin, the first mayor of Boston, several Revolutionary heroes and many other distinguished citizens and patriots.



## SOME ERRORS IN CONSTRUCTING FAN DISCHARGE SPOUTS.

BY R. JAMES ABERNATHEY.

In moralizing on the tendency of human nature to always do things wrong, I am led to ask the question: Has the mechanic (millwright) ever lived who knew by intuition how to conduct a current of air to, through and away from a suction fan or suction machine of any kind? If one can be found, the writer stands ready to doff his hat.

Any mechanic experienced in this line can do it, but he is sure to do it wrong until he has been taught to do it right. For instance, some mechanics of limited experience, when called upon to place a separator in position and fix it up for operation, gaze at the great gaping mouth of the fan drum, with amazement not unmingled with contempt at the stupidity of the fool makers of the machine for leaving such a mammoth opening for getting a little air out of it. Air is compressible and elastic and can be driven through any kind of a hole, a common gun barrel, for that matter, they think.

To neutralize the stupidity of the manufacturers, they don't do a thing but proceed to construct a tapering spout with the big end large enough to slip over the fan mouth, and the other end reduced to half, or less than half, the area of the fan mouth, for final discharge into the dust house. This is no fancy sketch, because the writer encountered at least one instance of that kind, and it was no common wooden spout either. It was a carefully constructed galvanized sheet-iron spout, delicately rounded and tapered. Notwithstanding, it had to be discarded and relegated to the scrap pile, a standing, or, rather, a fallen monument to the inherent tendency of man to do exactly wrong when he does not know how to do exactly right.

Another favorite way of doing the wrong thing in conducting air away from a suction machine is in making square turns in the trunk when its course is devious. "What's the difference," say the fellows that don't know; "it's only air, and will follow any course, straight or crooked, circular or square."

I one time had a rather amusing experience in connection with that kind of wrong-doing. It was a large elevator separator, in an interior elevator, the purchasers of which said it was no good. It was a separator by name only and not by nature, because it would not separate, so they affirmed repeatedly.

The air spout was run outward a few feet and then downward through the floor and thence outward again to the outside of the building. The local mechanic had compromised the matter a little by rounding off the outer corner of each turn and leaving the inner corner square. That, instead of making the situation better, really made it worse, because it contracted the sectional area of the air passage right at a point where it needed the most room and the most freedom.

By a careful examination I made sure there was nothing the matter with the machine proper; its mechanical condition being normal in all respects, there was not a remaining doubt as to where the whole blame rested and the guilty conduit was ordered detached from the machine. The manager of the elevator was quite indignant to have a reflection of that sort cast upon the intelligence of the best mechanic in that whole section of country, and declined to have the spout disturbed. I was firm, however, and finally the mechanic was sent for and the air spout taken down.

Before starting the machine, I opened the screening valves wide, and in a couple of minutes or so streams of mingled screenings and wheat about the size of the arm of a "featherweight" were flowing from the screenings chambers, and the manager prancing around like the passengers of a trolley car when a naked live wire comes in contact with the damp floor, looking for the leak, which he declared the machine had sprung. After letting him stew awhile I taught him how to make a separator separate, a lesson he had never before learned.

In that case, owing to the direction of the spout,

downward and outward, I had goose necks of large circle put on each turn, and, of course, there was no more complaint.

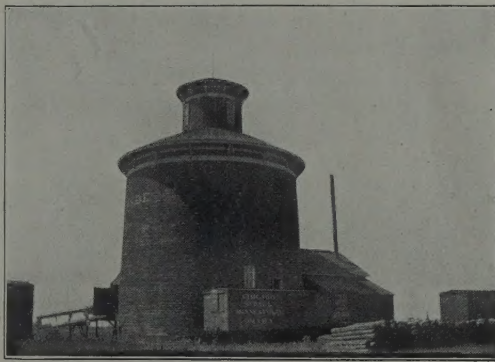
The common practice is to make the turns about the circle of the fan drum, but when any part of the direction of the air trunk is directly downward, the turn circles should be enlarged and made on the goose-neck order.

As a matter of fact, if much distance has to be covered by the discharge air trunk of a suction machine, much freedom should be allowed, whether the course be direct or indirect. In all cases, the spouts should be large enough to slip over the fan mouths, and the size maintained from end to end. In that way the frictional resistance will be reduced; it will be largely air against air instead of the air against the sides of the trunk.

## ELEVATOR AT CAZENOVIA, MINN.

The round elevator will be a novelty to some of our readers, although there are a number of them in the West. They were all built by a first-class firm, but the plan did not prove in practice to be popular, notwithstanding the excellence of the construction.

The elevator shown in the accompanying engraving, located at Cazenovia, Minn., is owned by the Davenport Elevator Company of Davenport, Iowa, of which John F. Dow is manager. The house is forty feet in diameter by forty feet high to the



ELEVATOR AT CAZENOVIA, MINN.

eaves, and was originally built for a cleaning and transferring house. Later, however, it was equipped with dumps, etc., and is now used by the company only to take in grain from the farmers direct.

It is a studded house, and contains fourteen bins, with a capacity of 2,200 bushels each, and two shipping bins of 1,200 bushels' capacity each. It is equipped with a Barnard & Leas Manufacturing Company's Wheat Cleaner, two elevators in the center of the house, hopper scales, and steam engine and boiler.

## THE RICE INDUSTRY IN TEXAS

Rice cultivation is comparatively new in Texas. Only a few years ago it was an unknown industry. Even in Southwestern Louisiana it is only within the past five years that the now indispensable system of canals reached its present perfection. Irrigation is the essential requisite for successful rice growing and in Texas an abundance of water has been obtained from artesian wells, where a supply from running streams is not at hand. By this method there is practically no limit to the land suitable for rice acreage in Southeastern Texas. The Texas rice acreage for 1900 has been estimated at over 53,000 acres. This will be a very great increase over previous years.

A very essential factor in the marketing of rice is the rice mill, in which the rough rice is cleaned. There is a mill at Beaumont and one at Galveston, five at Crowley, La., and three at Lake Charles and Westlake, La., and numerous mills at New Orleans. These mills are all kept busy and there will be work for more mills this season. With all the increased production of rice it is still higher priced

than ever. In Acadia Parish, La., the production of rice has increased from 15,000 bags in 1886 to 850,000 bags in 1899, yet the prices obtained now exceed the prices obtained then. In Jefferson County, Texas, over 500,000 bags of rice will be produced this year. Two additional rice mills are projected for that county.

## THE GULF OUTLET.

[A paper by Geo. H. Hunter of Wellington, read at the annual meeting of the Kansas Grain Dealers' Association, held at Topeka on March 14 and 15.]

The subject under ordinary circumstances would be threadbare; but to us who pay the freight and want the advantage of the short haul to deep water, it is like some of the famous texts to the student of the Bible, there are new beauties in it; and we love to think of the time when Kansas will get the full benefit of her relation to deep water on the Mexican Gulf. I am not here to throw bouquets or to pose as a critic, but there are some facts with reference to the Gulf outlet that cannot but be highly interesting to Kansas grain shippers.

Pardon me for speaking of my own home; but a Sumner County man, when away from home, who fails to remind his audience that his county raises more wheat than any other county in the world would be thought lacking in good citizenship; and I also want to remind you that our little city of Wellington, with only 5,000 population, ships more grain than any other town in the state, save two.

There is little use in going back over the years that have passed and relating to you who are familiar with it the outcome of the fight made for deepening the mouth of the Mississippi. Many of us were schoolboys, and some of us were just commencing business on our own account, when the name of Eads became famous in connection with the jetties of South Pass, the open gate to the mouth of the Mississippi. That was the first wedge that began the fight which will ultimately free the western grain grower from the domination of the East.

Then followed the splendid achievement of securing \$6,200,000 from Congress for a continuous contract at Galveston, and as a result the jetties there have given us, close at home, one of the most convenient harbors in the world. Directly across from Galveston there is Texas City, which has recently secured congressional appropriation of \$250,000, and this will increase facilities. To bring things down to date, the present Congress has appropriated \$367,000 to be immediately available for a twenty-five foot channel from the jetties at Galveston to Houston, thus making a deep-water port of one of the greatest railroad centers west of the Mississippi River.

We are thoroughly familiar with what has been achieved at Sabine Pass and Port Arthur. The enterprise of the business men having these improvements in charge, in connection with a liberal government, has added wonderfully to our facilities. Velasco, at the mouth of the Brazos, is destined to become a port of importance, as is Aransas Pass, further down. You see that I am confining my remarks to those ports which directly interest the Kansas and Oklahoma shippers.

Now there is a subject which may be unpleasant to some of you, but it is one that I must mention, and that is the rates from the great wheat-producing sections of this state and Oklahoma direct to deep-water ports and the rates from Kansas City to the same ports. The rate on wheat from my town of Wellington to Galveston is 26½ cents per 100. The rate on wheat from Kansas City to Galveston, nearly two hundred miles further, is 18 cents per 100. The rate on corn from Wellington to Galveston is 23 cents per 100, and from Kansas City to Galveston 16 cents. Remember that I spoke as a patriot a while ago with reference to the county in which I live as the greatest wheat-producing county in the world, and the little city in which I make my home as the third largest grain shipping point in this state. Connect that remark with the above rate and draw your own conclusions.

Now, I do not care to discuss this question at length. The proposition is one which must change



or there will soon be one of the most bitter fights against Kansas City that ever has been made by the people of the interior against a metropolis. I want to say that to my personal knowledge there are a great many merchants in the state of Kansas who never buy a dollar's worth of merchandise of a Kansas City house on account of this discriminating rate. . . . Personally, I have no prejudice against Kansas City. It is one of the greatest creations of western energy. . . . There is not a gentleman present who is not a friend of Kansas City, but there is also not one here, nor is there a resident of Kansas City, who does not realize that this unnatural condition cannot exist without embittering the people of Kansas against the young giant of the Mississippi valley.

Of course, you are all familiar with the fact that grain and grain products are now going from Chicago to Europe by way of the Gulf. Realize the full meaning of this statement, and then think by comparison of the injustice of the rate from Kansas and Oklahoma points to Galveston and New Orleans. Why should Kansas and Oklahoma grain dealers ship their grain to a market that forces our roads to maintain a rate that is so unjust? Only a short time ago Chicago and her roads east dictated rates to the West and Southwest. Does she do it now? No! Kansas City and the roads east and the short roads to the Gulf outlet to-day dictate rates to Kansas and Oklahoma points, and make us pay rates on grain for a 1,200-mile haul, while we are only 700 miles from one of the greatest ports now on the Gulf coast. So long as we, grain dealers and millers, blindly consign our grain and products to a point that dictates such unreasonable terms to us, so long will we continue to pay them. Kansas millers should unite and arrange to export their products direct via the Gulf outlet; the grain men of this state should get closer together and do the same thing. There is a power behind us that will help us to success, and all that is necessary for us to do is to unite to make it effective.

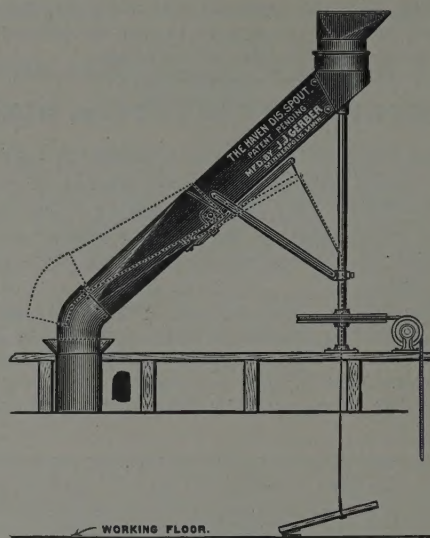
As I said, in the beginning, I will not go over the irresistible and unanswerable arguments in favor of the short haul. I do not ask for a rate to Gulf ports based entirely upon mileage, but certainly mileage should be considered. Every man knows that trade seeks the lines of least resistance. Grain at Kansas and Oklahoma points within twenty-four to thirty hours' haul of Galveston should not pay almost twice as much as Kansas City does for twice the distance. I believe it is our duty to begin once more an effective campaign in favor of the short haul to Gulf ports. I do not know but that it is best for us to adopt the plan of asking rates upon mileage, based direct from points of origin to points of distribution, and urge this in conversation, through our newspapers, in the debating rooms of the schools, and force politicians to present the matter on the stump. I do not like such a course, I prefer handling business in a business way; but the Gulf outlet is our natural gate to the markets of the world, and the people of our state must get the benefit of their close proximity to tidal water.

I did not intend when I first selected this subject to write at such length, because you all know I am not a public speaker, but my heart is full of this subject. It is one that comes close to my people. You can hear it in the counting room, it comes up at social gatherings, in fact, it is the one subject upon which the people of all parties unite, and they are ready to battle for their rights.

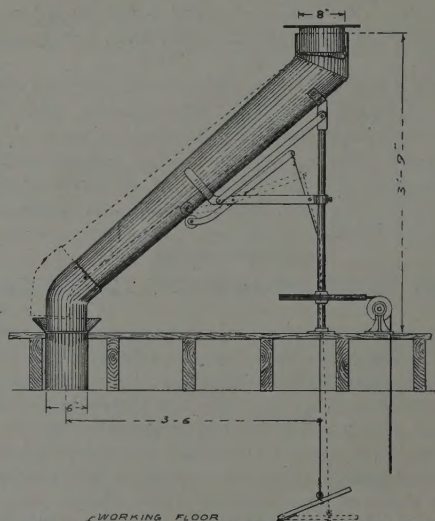
The Chamber of Commerce of Lincolnshire, England, is still asking for a bounty on wheat to encourage home culture. The bounty was asked by one resolution only when the price falls below 40 shillings per quarter (say \$1.20 per bushel); by another the bounty was asked to be paid on an ascending scale, the maximum to be paid to the grower who should hold his wheat up to June 30, following harvest, or, as another resolution put it, that a bounty should be paid all wheat in growers' hands on July 1, to make the price to the grower equal \$1.20 per bushel at that time.

## TWO POPULAR GRAIN DISTRIBUTING SPOUTS.

A well built elevator is equipped for economy in working and durability in its operating machinery. There are a great many things that must be included in bringing about this much desired combination, and one of these is to have an equipment of good grain distributing spouts. We present to our readers the Haven Grain Distributor Spout and the Gerber Improved Distributing Spout, which have proven time, labor, and money savers in the elevators in which they have been placed.



The Haven Grain Distributor Spout is built from heavy sheet steel, with a heavy cast-iron hopper at the top and a cast-iron elbow at the top and bottom. It is constructed with a pivoted rectangular lower end section, as shown in the cut, which allows the lower end of the spout to be raised completely out of the funnel or spout leading from the cupola floor to the bins. It is only necessary for the operator to pull a cord, from the working floor of the elevator, to swing the spout to the desired bin and the lower section of spout drops into the proper opening upon the release of the cord. The spout is constructed particularly for strength and durability and ease of operation.



The Gerber Improved Distributing Spout is also made of heavy sheet steel, with a cast elbow at the discharge end. This sets into the floor or funnels leading to the bins, making it impossible for the spout to get out of position or mix any grain.

The working of both spouts is similar. The Gerber spout is supported on an iron rod, which also serves as its axis. A cord from a wheel at the lower end of the rod passes over a pulley and thence descends to the lower floor, where it is fastened to an indicator wheel that is indexed to cor-

respond with the number of bins to which the spout can deliver grain. The spout is raised from the floor to the position of the dotted lines by means of another cord fastened to a lever and running through the iron rod to the working floor, where it is fastened to a foot lever near the indicator wheel. It is only necessary to press the foot lever to the floor when the end of the spout is lifted from the floor and swung to any desired funnel, where it is locked in place. Any ill adjustment of the spout in the funnel is shown at once by the foot lever. Any further information can be obtained from the manufacturer, J. J. Gerber, Minneapolis, Minn.

## KANSAS GRAIN INSPECTION DEPARTMENT.

[From a paper by A. E. McKenzie, Chief Grain Inspector of Kansas, read at the annual meeting of the Kansas Grain Dealers' Association at Topeka, March 14 and 15, 1900.]

Within our jurisdiction, namely, Kansas City, Kan., we have six large elevators besides minor ones, or warehouses, as they may be called, and a number of large mills. The mills and elevators together have a storage capacity of about 3,500,000 bushels, or a daily capacity for handling 300,000 bushels. At our country stations, to wit, Atchison, Leavenworth, Topeka, Wichita, Wellington, Winfield, Coffeyville and Parsons, Kan., we have a storage capacity of something like 3,250,000 bushels, and a handling capacity of about 500,000 bushels daily. Thus, taking together the eight different points of operation, we have a total of nearly 7,000,000 bushels' storage capacity, or daily handling capacity of about 800,000 bushels. Therefore, it may be seen that Kansas City, relative to Gulf export advantages, might some day be the center of the export grain fields, and also of the central grain state of the Union. In this event, Kansas will of necessity have to have a good inspection department—one that will make Kansas a model for all others.

I do not think, as some do, that Kansas inspection should be under the management of the different boards of trade or of the Kansas Grain Dealers' Association, for the reason that both, or either, would be directly interested and antagonistic to the other. Further, I believe that the department should come entirely under the control of the state, as do other institutions, thereby giving each and all employees full compensation, and that the law should be so amended that any surplus derived from the department, which may exist at the end of each year, should be and still remain in and to the fund of the inspection department. As the present law reads, the excess at the end of each year would have to be put into the school fund of Kansas without protection. During the spring months our receipts are insufficient to meet the necessary expenses of the department, and for this reason we should have access to the balance we had left from the previous year's work to pay the members of the department for their services, to which they are entitled, as is any other employee of the state. We are, however, getting along very nicely with our work. About all the trouble we now have comes from claims of demurrage, which arise from many different sources, a few of which I might mention.

The first and most numerous is the billing to one's self; or, in other words, John Doe ships a car of grain and bills it to John Doe, without instructions noted on the bill of lading "to notify" someone. When this car arrives the railroad company cards it in the name of John Doe, and we inspect it in the same name, as any other car, but we have to carry the sample to the office and there hold it until someone gets uneasy about the car and calls up to know why they had never received inspection on such and such a car. Of course, we tell them it has been inspected for a week or such a matter, but that we did not know to whom to deliver the sample and inspection certificate. Thus, you see, the trouble that arises from billing in this manner. You should always note on your bill of lading whom you intend to look after it for you. If you do not know at that time and are simply speculating while



in transit, you should then notify this department when you have decided who shall handle it.

Another cause for demurrage arises from careless cardings of cars, and another is caused by Missouri inspectors getting hold of the cars while on their side and putting their seals on the cars before we get them. We do not inspect any cars with Missouri seals on them, unless we have orders from the consignee.

We are trying to give good and fair decisions on all matters, and we think we might have all inspections from Kansas shippers. You do not always get Kansas inspection, and it would be a great benefit to this department to have your inspections. We need it, and the more we have to do the better we can do it. Would it not be a good plan, fellow grain dealers, for each of you to notify your consignees to see to it that you get Kansas inspection? We understand that some receivers have been charging for inspection and not giving state certificates. If you do not receive them, please notify us. We will thank you for doing so.

The first thing I did, when I came into the office, was to put the standard weight of a bushel of wheat back to 59 pounds, instead of 58 pounds, as

because the test weight was only 52½ pounds. At the request of the shipper, I went in person to Decatur to find the cause of so much difference. On my arrival I found that in transit this car had been transferred at Harlem by shovel, which would put the bottom wheat of the first car on top in the second car. I found that the mill had good cause to refuse the wheat, for on top it was only 52 test weight, that the bottom was 54 and the sample 52½. I made this trip to satisfy myself, for I had had many complaints of this kind. Mr. Shellabarger informed me that he preferred to buy direct from the country, but if the shippers in the country intend to plug the cars, as was done in this case, he would refuse to buy Kansas wheat at any price.

You should not criticize the inspection department too hard, when you load the car with good wheat on top and screenings on the bottom, and should we grade it "rejected," do not then excuse yourself by saying it was put in there to keep the good wheat from leaking out. And do not notify your consignee that your wheat tested 58 pounds, when it only tested 56 pounds, with the expectation of getting a better inspection.

One word regarding weights. It is our opinion

money to tide him over for a time, he makes his application to his local lodge, and if it is a growing crop that he has as security a committee of three members examines it and makes a report to the lodge. The lodge lets him have the money or as much of it as is safe on the crop, and he pays no interest. However, when he sells the stuff he pays into the treasury of his lodge 5 per cent of what he made by holding it. It costs him nothing to hold his grain, and if a concerted movement of this kind is made there will be no great rush of grain to market, causing prices to drop. If wheat is worth 30 cents when he gets his loan and it advances to 60 cents while he is holding it, he pays to the lodge 5 per cent of the profits he has made by holding it. This fund is then used to loan to others in like circumstances."

#### A COLORADO ESTABLISHMENT.

The numerous signs on the building illustrated in the accompanying cut pretty nearly tell the whole story. There are two important omissions, however, to wit, that the F. F. Roby Flour, Grain & Storage Company is successor to W. H. Roby



PREMISES OF THE F. F. ROBY FLOUR, GRAIN AND STORAGE COMPANY, COLORADO SPRINGS, COLO.

was made by W. W. Culver. I could never see any advantage in Mr. Culver's saying 58 pounds should be No. 2, for the reason that all contracts under the 58-pound rule were made on basis of 59 pounds, to conform with all other states, and for this reason I restored the old rule that 59 pounds should be the standard. I might say further that our greatest trouble is selling on test weight. Who the originator was, I am unable to say, but with the condition of the wheat the past year, it has been almost impossible for any two men to make the same test. In fact, I believe it would be better for the grain market if the test was done away with and the wheat inspected according to quality, regardless of test weight.

A word, now, regarding plugged cars. It has been our aim to build up the grain market of Kansas by raising the standard grade so that Kansas wheat would be at a premium, but to this we have met with much opposition. I heartily indorse the sentiment as expressed by a member of this Association, who said: "Anyone plugging a car should not be allowed to be a member of the Grain Dealers' Association." This practice is not only injurious to the shipper, but to the market in general. For example: Some time ago a certain car containing about 1,100 bushels of wheat, inspected by us as "57, 3 hard," was shipped to Decatur, Ill., to the Shellabarger Mills. Our inspection on this car was sustained by a private inspector of Goffe, Lucas & Carkener, of Kansas City, but this car was refused

that when the elevators get track scales in place of hopper scales and you get good cars and have them properly coopered and do not load them above the linings on the inside of the car, we will then have very little complaint about short weights.

#### KNIGHTS OF THE SOIL.

J. C. Hanley, general factotum of divers and sundry organizations of agriculturists, now organizing an international Hold-Your-Wheat Trust, has a rival promoter in one B. H. Barnes, formerly of Des Moines, Iowa, who has invaded Kansas with the prospectus of another farmers' trust, known as Knights of the Soil. He has organized several branches, or local lodges, in the state, and is said to be fairly flooded with applications for membership. The field of the Knights will be the entire Mississippi Valley, with Kansas, which is supposed to be "easy," as the starting point.

This new order will ignore all attempts to regulate things by means of political action. The politicians are believed to be incorrigible—hopelessly so; wherefore the Knights will be a "business union" of farmers, whose object will be "to enable farmers to hold their grain during times of low prices without paying interest on a loan," and to furnish them with correct statements of "visible supply" and weather conditions.

Mr. Barnes' hold-your-wheat scheme is stated by him as follows: "When a member needs a little

& Co., and that the business is located at the thriving town of Colorado Springs, Colo.

The building is 150 feet long by 75 feet wide, and has storage for 450 tons of hay and 75,000 bushels of grain; has power shovels for unloading grain from cars, and a mill for grinding corn chop, corn meal and rye and graham flours. The power is a 16-horse power gasoline engine. The owners operate also the Kearney Mill & Elevator at Kearney, Neb.

#### NEW LEHIGH ELEVATOR.

The Lehigh Valley Railroad Company will build at Black Tom, Jersey City, what will be one of the largest grain elevators on the Atlantic Coast. Pile driving for the foundations began on May 2. The new elevator is intended for the service performed by the company's elevator at Perth Amboy until it was destroyed by fire. The elevator will be surrounded by an entirely new freight yard now being laid out by the Lehigh Valley Company.

Now comes the usual story of cupidity overreaching itself. A substitute has been found for \$200-per-ton broom corn in the shape of a wood fiber which makes a good house broom, which can be procured at one-third the present price of broom corn; which is plentiful and can be sold profitably, at a price that would bring no gain to broom corn raisers.



**THE SEEDS THAT NEVER GROW.**

I nearly hate the thought of spring,  
With its delightful sun,  
For well I know the mail will bring  
A pack from Washington;  
A little package, duly franked,  
No postage stamps to show,  
And it contains those little seeds—  
The kind that never grow.

Our good and zealous congressman,  
Remindful of our vote,  
Upon his memorandum's page  
Puts down a little note;  
And when the proper time arrives  
For us to wield the hoe,  
He sendeth us the little seeds—  
The ones that never grow.

There're squashes with enticing names,  
And cabbages, I wot,  
So large that you would think that one  
Would shade a garden spot;  
So, with the pack from Washington,  
You amble forth to sow,  
With many a drop of sweat, the seeds  
That never care to grow.

How often have I plied the rake;  
How oft I've lounged about,  
With eyes alert to catch the first  
Signs of the coming sprout;  
In vain, in vain, my hopes have fled,  
My heart has filled with woe,  
Above the seeds from Washington—  
The seeds that never grow.

But yet each year my hopes revive,  
As spring reclothes the tree,  
And to my homestead surely comes  
The package marked "M. C.,"  
And, foolish-like, again I wield  
The sprinkler and the hoe,  
And, like a ninny, plant the seeds  
That never care to grow.

—Attributed to W. H. Settle of Madisonville, Ohio.

**COMMUNICATED**

[We invite correspondence from everyone in any way interested in the grain trade, on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

**BINDS BOTH PARTIES.**

*Editor American Elevator and Grain Trade:*—We think all contracts made with the farmer for future delivery should be written. This binds the farmer as well as the dealer.

Yours truly, F. O. DIVER.  
Middletown, Ohio.

**NO SIEVING NECESSARY.**

*Editor American Elevator and Grain Trade:*—In this, the southeastern part of Nebraska, the wheat raised is mostly of the Turkey hard variety. It is generally of good, heavy quality and will grade No. 2 if properly taken care of, therefore the practice of sieving is not known in this section.

Respectfully yours, H. H. BARTLING.  
Nebraska City, Neb.

**SHOULD NOT ADVANCE MONEY ON CONTRACTS.**

*Editor American Elevator and Grain Trade:*—My experience teaches me that the dealer should insist on having written contracts from farmers for grain sold for future delivery. The practice of advancing money on these contracts is, in our judgment, very bad unless proper security is put up for the money thus advanced.

Yours truly, L. F. ELLERMEIER.  
Swanton, Neb.

**HOW THE FARMERS DO IT.**

*Editor American Elevator and Grain Trade:*—We do not take written contracts. I have urged my managers to let me do so, but, as they are all farmers, they do not seem to think it necessary. I notice this, however, if one of them lends a neighbor \$5, a "promise to pay" contract is made out and no questions asked.

WESTERN.

**DEALERS ENCOURAGE DISHONESTY.**

*Editor American Elevator and Grain Trade:*—I think that all grain dealers should make written contracts with all farmers from whom they purchase for future delivery, and then the dealers should make it their duty to see that they live up to them. I think this would better the condition of the grain trade generally. Many dealers make the farmer

tricky and dishonest by encouraging him to "do" the other dealer or dealers who are his competitors.

Yours truly, JOHN A. DIX.  
Alida, Kan.

**SCREENS WHEAT BEFORE BUYING.**

*Editor American Elevator and Grain Trade:*—For several years past we have screened the wheat as a system of dockage, and this gives better satisfaction than any system employed by or known to us. Nebraska grain dealers, as a rule, have adopted this system, as the farmers will admit the dirt much more readily than they will stand a cut in the price.

Yours truly, JACQUOT & SON.  
Merna, Neb.

**AVOID UNCERTAINTY BY WRITTEN CONTRACTS.**

*Editor American Elevator and Grain Trade:*—I think that whenever a grain man buys grain for future delivery, say in 10 or 15 days, he should always take a written contract. Then he makes sure there is no misunderstanding, and he can sell his grain and feel reasonably certain of getting a profit out of it. If he does otherwise, he may get the grain or he may not.

Yours truly, G. C. DUEHLING.  
Bruno, Neb.

**NO PARTNERSHIP WITH RAILROADS.**

*Editor American Elevator and Grain Trade:*—In regard to the obligation of the railroad companies to pay the elevator proprietors a rental for the use of their elevators, I can only say for myself that I would not wish to ask it as I am not running my house to accommodate the railroad companies. I prefer to be as independent of them as possible. Other locations and conditions may be different, but for me I want no partnership with those fellows.

Yours truly, N. W. HOAG.  
Delavan, Wis.

**A BUSINESS-LIKE PRACTICE.**

*Editor American Elevator and Grain Trade:*—I am positive that the taking of contracts for the future delivery of grain would be a great improvement over the present slipshod methods pursued by many grain buyers, and should be insisted upon by every dealer. It is but a business transaction and should be done in a business manner and until it is the dealers will get the worst of it every time.

Yours for anything that will better existing conditions,

E. F. PECK,  
Manager Farmers' Coöperative Association.  
Cedar Bluffs, Neb.

**TWO SUFFICIENT REASONS.**

*Editor American Elevator and Grain Trade:*—Regarding the question of taking written contracts from farmers for grain sold for future delivery. It is our opinion that written contracts should be insisted upon by all dealers, for the reason that disputes as to the price and conditions of the sale are thereby prevented. Furthermore, if the value of the grain sold for future delivery is \$50 or more, and no money is paid on the contract at the time of entering into it, it is unenforceable. These two reasons seem sufficient.

Very truly, A. P. STAFFORD, Manager.  
Nebraska City, Neb.

**VERBAL CONTRACTS PROVED ONE-SIDED**

*Editor American Elevator and Grain Trade:*—We are in favor of taking written contracts when grain is bought from farmers for future delivery. The conditions in our part of the country are such that the majority of farmers do not live up to their verbal contracts if grain advances in price.

We have never had any trouble when the market declines. Then Mr. Farmer will always have 200 or 300 bushels more which he understood we would take at the same price.

We have sometimes been left in a bad row of stumps when the market advanced. We had 2,000 bushels contracted from farmers and were able to sell at a margin. Before delivery the market advanced. Mr. Farmer heard of it and went back on his word, leaving us to pay the difference in

the market value of the grain sold to the track buyer.

We believe it would better the trade in general if all dealers would strictly adhere to the contract plan.

Yours truly, EYMANN & FRANZ,  
Per A. C. Eymann.  
Moundridge, Kansas.

**WANTS TO QUIT BUYING DIRT.**

*Editor American Elevator and Grain Trade:*—We do not sift wheat before purchasing it, but we do not know of a better method of arriving at the dockage, and doubt if a better one can be found.

We are heartily in favor of sifting wheat for dockage, and are only prevented from doing so by competitors on every side, who continue to buy wheat and dirt, as we are doing. Last week our cleanings on a 700-bushel car of mixed wheat amounted to 27 bushels. This, figured at cost price of 46 cents a bushel, amounts to \$12.42, which is virtually thrown away.

We heartily commend your efforts to enlighten the dealers as to the justice and importance of this matter.

Yours truly, KINGSLEY ELEVATOR & GRAIN CO.  
Minden, Neb.

**ELEVATORS ARE NOT RAILROAD WAREHOUSES.**

*Editor American Elevator and Grain Trade:*—While railroads are not disposed to use the elevators along their respective lines for storage of grain, we do not think it would be equitable to compel them to do so. Western elevators are no more storage houses for railroads than are corn cribs. Elevator owners are not likely to store grain for the mere accommodation of railroad companies or farmers. There is very little analogy between articles of general merchandise and grain.

We think, however, the railroads should be liable for damages when, as common carriers, they cannot furnish cars upon due notice for the transportation of grain.

Yours truly, HARROUN ELEVATOR CO.,  
By Wm. Burke.

St. Joseph, Mo.

**FARMERS "FORGET" VERBAL CONTRACTS.**

*Editor American Elevator and Grain Trade:*—We have not given the subject of taking written contracts from farmers much thought, but this custom would no doubt better the condition of the trade. By having a written contract it would show just what it would take to make everything satisfactory to both buyer and seller, and there should not be any room for misunderstanding. In some instances we have known the seller to forget how much he sold, especially if the market was up at time of delivery.

We believe a written contract to be the best way of doing business but it might be hard to get from everyone, and perhaps in some localities it could be enforced only by a combined effort on the part of all the dealers.

Yours truly, E. EVERSOLE & CO.  
Hindsboro, Ill.

**VERBAL CONTRACTS PROVE UNSATISFACTORY.**

*Editor American Elevator and Grain Trade:*—Regarding the taking of written contracts from farmers for grain sold by them for future delivery, we think that if a dealer wants to avoid trouble he should always give and receive a written contract. This is the proper business way, and there can be no misunderstandings, as the terms of the contracts speak for themselves.

Occasionally dealers make purchases from men who forget the conditions of their sale and this leads to bad feeling and unnecessary annoyance. A written contract avoids all this, and nearly all farmers are willing to sign a contract when the trade is made and before the market changes.

My experience is that 19 out of 20 farmers remember the terms of sale, and will deliver as agreed. The twentieth man will forget and be dissatisfied and refuse to deliver. If he is coerced



into a fulfilment of his trade by a suit for damage or for difference in price, many of his neighbors will, as a rule, side with him, and the result is, bad feelings among a lot of customers. Better make written contracts and avoid trouble and loss of business.

Very truly yours, G. T. ELLIOTT.  
Sterling, Ill.

#### TAKE WRITTEN CONTRACTS ONLY.

*Editor American Elevator and Grain Trade:*—We took contracts last year for all grain bought on time. If the farmer refused to sign the contract, we did not consider the grain bought and only allowed them the price the day of delivery. We found this method very satisfactory, as we knew just what we could depend on and no misunderstanding could arise between the other parties and ourselves. The margins are so small that mistakes in calculating the amount of grain on hand are too costly.

Yours truly, E. A. MAUST & SON.  
Falls City, Neb.

#### INSISTS ON WRITTEN CONTRACTS.

*Editor American Elevator and Grain Trade:*—All dealers should insist upon written contracts as it is a very important practice.

I have heard some dealers say that they have lost some of their best customers by asking them for written contracts. I say, only in their minds. I have been taking written contracts more or less for years and during the last three months I made every farmer sign a contract for grain sold me for future delivery. I have not lost a customer by this practice, nor did I lose any grain during the last rise in the market.

Whenever a farmer hesitates to sign a contract and says that his word is just as good as his contract, the dealer should tell him that he is right, but that all the good men must sign the contract in order to get the poor, dishonest ones to do it.

Yours truly, WM. GEHRKE.  
Shickley, Neb.

#### PREFERS VERBAL CONTRACTS.

*Editor American Elevator and Grain Trade:*—Concerning the taking of written contracts from farmers for grain bought of them, would say that I have tried it and quit.

My experience is that if a farmer wants to sneak out of a contract, he will find a way to do it, even if it is written, and it will cost more than it will "come to" to enforce the contract, whereas, if he is not bound in writing, the average farmer feels in honor bound to stick to his agreement and will nearly always do so.

I always make a memorandum of purchase in the farmer's presence, so he can see that I know exactly what the agreement is. Of course, this will only apply in personal dealings with farmers, and I do not think it would be satisfactory if the business were done through agents, as it must be in the case of line elevators.

Yours truly, J. M. ELWELL.  
Springfield, Neb.

#### ADVANTAGES OF WRITTEN CONTRACTS.

*Editor American Elevator and Grain Trade:*—In my experience of about 15 years in the country grain trade, I can see no objection to the use of the written or printed contract in dealing with the farmers for future delivery. But there are a great many advantages. Even where both parties are strictly honest, in the absence of a written contract there is liable to be a misunderstanding. Where either party is dishonest the written contract is a very desirable instrument for the honest man to have.

Where a verbal contract is made and the price goes against the seller, he almost invariably expects, and sometimes demands, some concessions from the buyer. These the buyer will often grant rather than have any trouble, and if the buyer does business on business principles, he receives no benefit from the variation in price, as he sold the grain at time of purchase, for his own protection.

In my experience I have encountered but little objection from the farmers when a written contract

was requested, and in almost every instance the contract has been filled according to its terms more fully than the same party would have fulfilled a verbal contract.

I think the farmers can be easily educated to give written contracts, and it is decidedly better, safer and more businesslike than the verbal contract custom.

Yours truly, S. N. DODD.  
Toledo, Iowa.

#### ALWAYS MAKE WRITTEN CONTRACTS.

*Editor American Elevator and Grain Trade:*—Every dealer ought to make a written contract with every farmer from whom he buys grain to be delivered at any future time. We always aim to make a contract of this kind, stating what the grade shall be, what the price shall be, and the date it is to be delivered, and that a fair reduction should be made for grain grading lower than the contract calls for.

There is no business in a man that will buy grain of a farmer on verbal contract, because the chances are that if the grain goes up the farmer will never fill his contract. We ask our men at the different stations always to make a contract when they buy grain to be delivered at any future day, have farmers sign the contract, and send in an acknowledgment of such contract to our head office. Where they do not and the grain goes up, we very seldom get the grain. I think that where people make it a habit to contract verbally with the farmer, it would be much better for them to make contracts in writing, and then see that the farmers live up to them.

Following are the two forms of the contract we use:

Marcus, Iowa, ..... 189...  
This is evidence that I have this day sold to .....  
..... of Marcus, Iowa, .....  
bushels of No. .... at ..... cents per bushel,  
which I am to deliver in good order at buyer's corn  
cribs, or elevator, as purchaser may elect, on or be-  
fore ..... 189..., a fair reduction in price to  
be allowed for all damaged or blighted grain.  
Received on above contract \$. ....  
..... Seller.

Marcus, Iowa, ..... 189...  
This is evidence that we have this day bought of  
..... of Marcus, Iowa, .....  
bushels of No. .... at ..... cents per bushel,  
which he is to deliver in good order at buyer's corn  
cribs, or elevator, as purchaser may elect, on or be-  
fore ..... 189..., a fair reduction in price to  
be allowed for all damaged or blighted grain.  
Paid on above contract \$. ....  
..... Buyer.

Yours truly, E. J. EDMUNDS.  
Marcus, Iowa.

#### VALUE OF WRITTEN CONTRACTS OVER-ESTIMATED.

*Editor American Elevator and Grain Trade:*—The advisability of taking written contracts from farmers for grain sold for future delivery depends largely upon the kind of men you are dealing with.

I find that, with regular customers, men who care for their honor and reputation, a verbal agreement and understanding can generally be depended upon; and the only thing needed in such cases is a memorandum of the transaction in a book provided for that purpose. I would not regard a written contract as very valuable if made with a man who regards his word so lightly as to wholly disregard it under changed circumstances, simply for the benefit of a few pennies in price. Generally, if the business of such a man comes to me at all, it will come unsolicited and be settled for only as it is delivered and at a price then offered.

Grain dealers should not be too solicitous when dealing in "futures" with all kinds of people, for the most that can be depended upon, after all, is a man's honesty. Misfortune, death, loss by fire, hail, excessive rains, floods, or drought are good and sufficient causes for a man's failure and inability to comply; and his contract, though written, would not be enforced under such circumstances.

I find that a great many men, when asked to sign a written contract of this kind, look upon the request as a sort of impeachment of their honor, and

the mutual confidence supposed to have existed becomes somewhat soured, and, very probably, you have lost a good customer.

I think, however, where written contracts are used, they should not be too much one-sided, and should also bind the buyer to receive and pay for the grain in accordance with the stipulations named.

Respectfully, E. M. FLICKINGER.  
Kingfisher, Okla.

#### STIFFENING OF BACKBONES NEEDED.

*Editor American Elevator and Grain Trade:*—The taking of written contracts should be insisted upon by all dealers for grain purchased for future delivery. This custom would better the condition of the trade and prevent the dishonest farmer from breaking his contract, and from being tempted to do so by the dishonest dealer who offers him a half cent more.

It is written, "The poor ye have with you always," and in this age we can also write, the dishonest ye have with you always, but an all-wise Providence has given us a minority of the latter and a majority of the former, for which we are thankful. The dealer who does not insist upon a written contract when purchasing grain for future delivery deserves but little sympathy if the grain is not delivered. Human flesh is weak and it is a great temptation to a poor, struggling farmer to break his verbal contract and haul his grain to the next town where there may be a dealer who will pay ½ cent more and ask no questions.

Let the dealer stiffen his backbone and insist on a written contract and he will benefit himself and better the conditions of the trade.

Yours truly, FRED FAULKNER.  
With W. R. Mumford Co., Chicago.

#### DEALERS SHOULD DEMAND A CLEAN BILL OF LADING.

*Editor American Elevator and Grain Trade:*—I am free to confess that previous experience with railroads has made me dubious as to the results of any agitation. I will also confess that the question of a clean bill of lading appears to me to be paramount to the matter of a rental from the railroads for our elevators.

I have yet failed to find a dissenting voice among grain dealers in the matter of a clean bill of lading. The sentiment is unanimous, but action by the associations seems dormant. The great expense of a clean bill of lading to the railroads precludes the idea of getting such a boon from them. Solicitude on the part of some dealers prevents the associations from being aggressive in the matter. There are good reasons why grain dealers ought to have a clean bill of lading:

First. It is only asking for what every other patron of the railroads gets.

Second. It would save the railroads much money in car repairing, since it devolves upon trainmen to handle cars carefully.

Third. Grain dealers could buy on a closer margin with perfect safety.

I am sure I would be perfectly willing to fit my elevator with scales to meet the approval of the railroad if I could be assured that what grain I put in a car would be delivered at destination. It is but natural that the railroad company should say, "Car arrived in apparent good condition," no matter what the shortage.

I do know that grain dealers, without an exception, complain of shortages, and that they are helpless in getting relief. It seems to me that it behooves either the railroad companies or the storage elevators at destination to clear up the matter of who is guilty of the wrong. I presume my shortages are about the average of small elevators. During the year ending January 1, 1900, my losses were close to 500 bushels of grain. Every honest grain dealer would be willing to have a disinterested party weigh his grain into cars if he was assured of the delivery of same.

While the railroad charges a rental for the ground on which the elevator stands, it would seem the height of audacity for the occupant to ask a rental for the grain stored therein. A number of times I have come near losing good sales owing to a



failure to secure cars, and many a dollar have I lost in labor and expense in waiting for cars. Fifty dollars would not nearly cover the utterly useless work that I have done in the past six months owing to failure to secure cars when wanted.

During the past ten days several cars of cattle have been shipped from here to Chicago. I noticed that nearly every time cattle were loaded an engine was kept in waiting. With every two cars a round trip to Chicago and return was given to someone, in addition to other favors. If the grain dealer had shipped the corn that those two cars of cattle ate in fattening, the railroad would have received \$3 in place of every \$1 they got in freight.

Treat the grain dealers with the same favor as other shippers and I am sure they would exert every effort to promote the railroad's business. By all means let us have a clean bill of lading or a storage rental on grain. Personally, at this time, I prefer the former.

Respectfully, J. R. GRAHAM.  
Hastings, Iowa.

#### WRITTEN CONTRACTS FOSTER HONESTY.

*Editor American Elevator and Grain Trade:*—As to whether or not a grain dealer should enter into written contracts with farmers for grain bought or sold, will say, yes, he should by all means. While I have seldom done so, I believe it to be the only true method of doing business.

When a dealer buys grain from a farmer, whether the contract be written or verbal, he is bound to receive the grain no matter what the condition of the market or how much the price has fallen off. If he does not his career as a grain dealer will be short and full of woe.

On the other hand when we accept the bids of our eastern and southern connections, we are bound to them in writing and have to fill our obligations or suffer the consequence.

While I have been very fortunate, having lost only one lot of corn in the last seven or eight years that I can call to mind, I know that the notion prevails with some people that they can sell to a dealer and if the price goes down they can deliver it, but if the price advances  $\frac{1}{4}$  cent, they can resell to his competitor or some competing station and leave the first buyer to whistle for his grain, and I guess they are right. Now, this is all wrong, and while a written contract can hurt no honest man it may go a long ways toward reforming a dishonest one.

Yours truly, DICK WEST.  
Wyoming, Neb.

#### INCREASING GRAIN EXPORTS OF NEW ORLEANS.

*Editor American Elevator and Grain Trade:*—To the general reader there is no subject so dry as statistics, and yet none possess more intrinsic merit, especially to commercial men. Based upon a series of statements compiled by the treasury bureau of statistics for the year 1899, the analysis of movements of export by ports shows that in the export of corn the port of New Orleans is gaining on New York and Boston, and that the movement from the grain fields toward the seaboard is apparently being more generally distributed than formerly.

The exports of corn, for instance, from the port of New York increased from 13,500,000 to 40,000,000 bushels between 1893 and 1899, an increase of 200 per cent, while those from Boston increased from 5,500,000 to 17,500,000, New Orleans from 6,500,000 to 22,000,000. Thus New Orleans shows a much larger percentage of growth in her export of corn than does New York or Boston.

No better indication is needed of New Orleans' extension of commercial intercourse, placing her in communication with all the countries of the world. Steamers running to no less than ninety-seven different foreign ports during the past season is of itself evidence of the increase in the past and a guarantee of a still greater volume of business in the future.

Rumor has it that a line of steel barges will be inaugurated between New Orleans and St. Louis in the near future, which would give an increased impetus to the grain business. In this connection it is but just to say a word of praise for the railroads, who have done so much to foster the grain export

business, particularly the Illinois Central, who possibly has done more than any other corporation to build up the export grain business here, having spent millions in elevator and terminals.

Steamers clearing yesterday (April 17) for foreign ports, in addition to other cargo, carried out 657,620 bushels of corn, wheat and oats.

Very truly yours,  
FRANCIS P. SALA.  
New Orleans, La.

#### WRITTEN CONTRACTS PREVENT DIFFERENCES.

*Editor American Elevator and Grain Trade:*—I have practiced taking written contracts from farmers to a great extent for the last ten years, and am pleased with the results. I never have any trouble in having them signed at the time the trade is made, and in case of delivery of grain or refusal to deliver, I find them very useful, as it cuts out all chances for differences in the trade, which often occur, especially when the grain is worth more at the time of delivery than at the time it was sold. I think if every dealer would enforce written contracts that it would be a benefit to the grain trade, and give better satisfaction.

Following is the subject matter of contract which I use in most cases:

#### GRAIN CONTRACT.

This Agreement Witnesseth: That I have this day sold to V. C. ELMORE, of Ashland, Illinois, .....bushels of good, sound, merchantable .....to grade No. ....or better, at .....per bushel, the same to be delivered by me to him in his cribs, bins or elevator at ..... Illinois, as he may direct. The said grain to be in good, merchantable condition, free from snow or rain, and delivered on or before the.... day of..... 189.., at his option.

I further state that I am the sole owner of said grain and that the same is now..... on the land known as the..... farm, in ..... Township, ..... County, Illinois, and that the same is free from and clear of all liens and encumbrances whatsoever.

I make this statement for the purpose of obtaining credit and securing whatsoever sum of money may be advanced upon this contract, either at this date or at any time between this date and the delivery of said grain. If default be made in the delivery of said grain the said V. C. Elmore, or his representative, may, without suit, take possession of the same wherever found and market the same at my expense, and after paying all expenses, moneys advanced with interest, etc., the balance, if any, shall be paid to me.

Have received \$.... on above contract, for which I agree to pay 7 per cent interest.

Signed.....  
Witness.....  
Dated this..... day of ....., 189...

Yours respectfully, V. C. ELMORE.  
Ashland, Ill.

#### RAILROAD TRACK SCALES.

Railroad construction has been so completely revolutionized of late years by the substitution of heavier for lighter materials that it is not surprising that the track scales of former days of thirty tons' capacity are now altogether out of date. Nowadays railroad track scales are made with a capacity of from 100 to 125 tons and with platforms 38 to 42 feet long. They are very substantially constructed and will last for many years, and will probably prove to be equal to any load that may be put on them in the future of railway construction.

Of the many varieties of railroad track scales one of the most interesting is the scale for weighing cars in motion. Such a scale is made 130 feet long and of a capacity of 150 tons. One or two cars at a time are shunted onto the track in which this scale is located and the weight is mechanically recorded as the cars pass over the balance.

Suspension track scales are used where it is not practicable to have a scale pit. In such a case the frame and lever are all above ground, overhead, and the platform of the scale, at grade, is suspended from the scale above by rods.

Track scales are sometimes placed on a main line, and in this case provision is made for running over them at full speed without affecting the scales. For this purpose what is known as a dead rail is used,

supported entirely independent of the scale and resting on a solid foundation of its own.

The largest of all scales in use in this or any other country are the weigh-lock scales, of which there are only four or five in the United States. These scales are of a capacity of 300 to 500 tons each, and with them loaded canal boats are weighed, the weights of the boats empty having been previously ascertained. The weigh-lock scale is practically a suspension scale in a canal lock. The boat is floated into the lock in the usual way, and the water is then drawn off, leaving the boat supported in the cradle, or platform, of the scale. After the boat is weighed the lock is filled and the boat is floated out.

#### ELEVATING CHARGES AT MONTREAL.

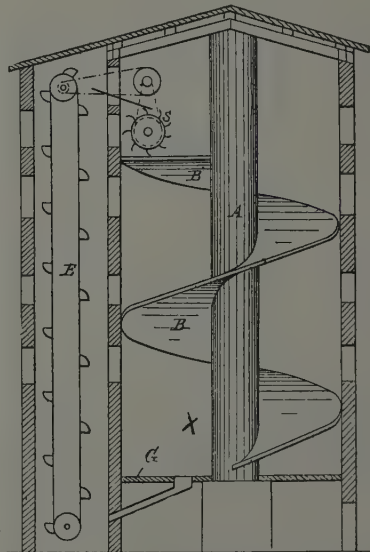
The Montreal Floating Elevator Company, on May 3, advanced its rate for transferring grain from the river and lake barges to ocean steamers to half a cent per bushel. This is an advance of 20 per cent over last year's rate. The advance was made without notice and was not anticipated by either shippers or carriers, the first intimation of the change being a higher charge noted on the bills rendered for the service. The company claims the new rate is simply a restoration of rates to that in force prior to the season of 1899.

The Corn Exchange Committee endeavored to have the company reconsider its action, on the ground that the increase would reflect unfavorably upon the trade of the port. The company's directors, however, would not give their consent to any conference. It was therefore resolved unanimously by the Corn Exchange Committee to enter a formal protest against the reinstatement of its former rates by the Elevating Company.

It is said that the Canada Atlantic Company, one of the companies most affected by the change, and which has a three years' lease of the barges and floating elevators of the former Kingston and Montreal Forwarding Company, will send to Montreal its floating elevators from Kingston if the high rate is maintained, as the advance means to it quite a large item of increased expenditure.

#### WHEAT BIN OR SILO.

A patent has been granted for a wheat bin or silo of rather unique construction. The elevator, E, is put in motion by the sprocket wheel, S, elevating the wheat in the cups from the bottom of the bin, G. The wheat elevated is discharged upon a plat-



form of wood or zinc, B, which descends in a spiral around the column, A. The pitch of the spiral, B, causes the wheat to descend so that it returns to the bottom to be again returned as often as necessary until sufficiently "turned over" or ventilated.

Milwaukee's first grain boat for the lower lakes sailed on the morning of April 19, with oats for Buffalo.



## WHAT CONSTITUTES A SUCCESSFUL GRAIN MAN?

[From a paper by H. J. Diffenbaugh\* of Washington, Kan., read at the late annual meeting of the Kansas Grain Dealers' Association.]

I come to you, therefore, with no new ideas, but in my homely way to remind you that your success depends largely upon your own individual actions; partially upon the actions and character of your fellow grain men. Upon your own actions, when you lose sight of the rights of others and attempt to monopolize the business in your locality by "bucking." You throw down the gauntlet to all comers; and I think you will agree with me that in the course of time they will get there, or, at least, a sufficient number of them during a decade to make the monopolizer realize, if he is not a fool, that he has taken a lifelong contract on his hands. If you are very wise you will cancel such a contract before it has been in operation thirty days, if, indeed, you enter into it at all. Persistence in this method of doing a grain business leaves no room for monotony while the fever is on, but in after years, when the "might-have-beens" come crowding in upon you unbidden, when the disappointments of life cluster thick about you, when your property has depreciated, when the new home that was to have been built when you made some money, when ambitions have been thwarted, then will you find plenty of food for bitter reflection and very little sympathy. The former you deserve, the latter is not negotiable as security. How about the other fellow? you ask. Nine times out of ten it is "the other fellow." If we climb down from our high and mighty pinnacle of pride, get "next to" the "other fellow" and stop shooting at him from long range, we will find that eight-fellows out of the other nine exist only in our imagination. It is barely possible that the ninth man may be in evidence—that the fool killer has overlooked him.

Two propositions present themselves in this case. Either get out and let the next man have his turn at him, or metaphorically stab him under the fifth rib in short order. It occurs to me that in this one proposition—the abuse of the rights of others—lies most of the trouble that befalls the local grain dealer. This association, by the very nature of its organization, is bringing the grain men together and acquainting them with each other so as to lessen, if not to entirely eradicate, this local friction. It means a steady and reliable market, and a fair, just and equitable remuneration for the labor and time spent and the money invested in property; thus placing the grain business upon the same footing as other commercial enterprises. This is one of our individual duties to each other, and as we perform these duties will our organization be successful and our mutual interests protected and taken care of.

It goes without saying that, other things being equal, the fellow with the best rate or largest rebate will make the greatest financial success. If, as individuals, we can get nothing better than tariff rates, and those days have long since past for the little dealer (and perhaps it is best so, for too many only abused their privileges), then let us put ourselves in harmony with the fortunate few who do possess such favors, and make the very best of our opportunities. I have no particular grievance against the happy possessor of a privileged rate, or its equal in terminal elevator advantages, provided he does not use that rate or advantage to throttle my business but is content to operate through me to our mutual advantage. This association has the power, properly used, to bring about the best results along this line.

I am also a believer in the justness of the claims of elevator owners for an elevator rental of at least one cent per one hundred pounds for all grain passing through the elevators. This is a consumption most devoutly to be wished. The arguments for it are weighty, and this result can only be brought

about by concerted action through the association of elevator owners.

Loaning money in order to secure or hold trade, as a general proposition, is, in my opinion, not the proper thing. That is the business of the banker, and unless conducted strictly on banking principles, it is a source of constant worry and trouble, and in the end not satisfactory to your customers in general and very often unprofitable to yourselves. Conducted on the banking plan, you would be classed with "grinding corporations" and fail in your objective: the purchasing of a clientage with favors. The success of the cash stores of to-day demonstrates that with no bad accounts to deduct and nobody mad at you because you express a desire to have returned to you what you have loaned, your business is strictly in hand and your assets more certain.

The grain business is rapidly approaching in our state what we might call the merchandising era. As the farmers become financially able they will hold the crop on the farms and the cribber will be a thing of the past very largely. It behooves a grain dealer, then, to see that he has money or its equivalent—grain—at his local point and an honest weigh-master at the point of destination, for his margins will be smaller in the years to come.



H. J. DIFFENBAUGH.

I believe the railroads should receipt to a grain shipper for the exact weight of grain, the same as they do for a given number of sacks of flour to the miller, and bags of sugar to the grocer, and number of stock to the stock men, and let that weight govern, or the giver of the receipt, through its agents, be held responsible for shortages. The grain men of the West have been outrageously robbed in days gone by; but, thanks to the efforts of the officers of our association, this evil has been much lessened. Under the above plan it would of necessity be entirely wiped out. Where, then, would be the fellow who could steal twenty to forty thousand bushels of wheat in a season from his shippers?

Do you give your customer a price for his grain and the rise of the market until the grain is delivered? Do you make his wheat test a pound heavier than in fact it does test? Do you make his load of grain weigh a bushel more than as a matter of fact it does weigh? In settling do you purposely make a mistake of a dollar or more in favor of your customers? Do you take an inferior quality of grain for the grade you purchased and pay the price of good grain for it? Do you do any of these, or a dozen other things, in order to hoodwink your competitor and draw trade your way, always certain to impress upon your customer the fact that you are a liberal fellow? "Self-praise is half slander." Candidly, if I were your customer, I would watch you very closely. Any of these tricks resorted to are simply used by your trade to get

more of the same kind of concessions from your competitor.

For years the grain business has in too many instances been conducted under the rule laid down by the author of David Harum. You will remember it was David's golden rule in a "hoss" trade to "Do unto the other feller the way he'd like to do unto you—an' do it fust." Allow me to suggest another rule of action: "To yourselves be true; and it follows, as the night the day, thou canst not then be false to any man." Treat your competitor as you would have him treat you. If you would be successful, listen to the dictates of reason and common sense, and act along those lines.

## MOISTURE IN CORN.

[A paper by G. L. Graham of St. Louis, read at the annual meeting of the Nebraska Grain Dealers' Association at Omaha on April 4, 1900.]

Corn contains moisture according to conditions of atmosphere and temperature about as follows: When growing and nearing maturity, in the milk, 50 per cent; at maturity or gathering time, 24 per cent, sometimes as high as 30 per cent. When partially cured, or about the time farmers usually begin hauling their new corn to market, 18 per cent to 20 per cent; about the time of the first hard freezing fall weather, 16 per cent to 18 per cent, and so remains in that condition (usually designated as frozen dry). The moisture remains in the corn in a congealed or frozen state until the advent of warm spring weather, when it again begins to give off moisture according to atmospheric conditions until fully cured, when the moisture is reduced to 12 per cent to 14 per cent. Corn usually gives off the greatest amount of moisture beginning with the warmer weather of spring, say in April up into June (the so-called germinating season), usually from 16 per cent to 18 per cent down to 12 per cent to 14 per cent, or a loss of about 4 per cent to 6 per cent, and will so remain during the hot weather, say June 1 to November 1, seldom going below 12 per cent. With the beginning of damp, heavy fall weather, corn will begin taking up moisture according to weather conditions, up to say 14 per cent to 18 per cent, until the usual freezing winter temperature congeals or freezes the moisture again and then repeat conditions as to moisture as first described.

Hence he is a wise farmer who markets his corn in the ear or on the cob immediately after maturity, or as soon thereafter as possible, if the price obtainable is satisfactory, so as to have it weighed while containing from 18 per cent to 20 per cent moisture, and he continues marketing his corn as fast as possible up to and including the cold weather, when corn is usually called frozen dry. And the shipper who buys the early deliveries of corn in the ear at 70 pounds per bushel and shells and ships after the warm weather appears the following spring, usually has a heavy shrinkage. I venture the opinion that on early purchases of ear corn, at 70 pounds per bushel at maturity, cribbed and carried over, shelled and shipped the following summer, during August and September, the shrinkage in corn and cob usually runs from 20 per cent to 33 1-3 per cent.

My advice to shippers is to hurry to market all corn you have on hand that you contemplate shipping before summer to avoid the usual 4 per cent to 6 per cent shrinkage from April 1 to June 15, which, with corn at 30 cents per bushel, would indicate a loss of 1 1-5 cents to 1 4-5 cents per bushel or \$1.20 to \$1.80 per 100 bushels, necessitating an advance in price of 1 1/4 cents to 2 cents per bushel to hold you without loss if shipped after June 1.

Why does ear corn usually keep? Because if properly cribbed, cribs being well protected from the elements, roof, sides and ends, and at a suitable distance from the ground (not less than two feet, and I would recommend a width not exceeding eight feet), you have free circulation of air around each ear, or nearly so, and, as indicated further on, allowing free and full capillary action and more especially through the light pith in center of cob, which is, by nature's own formation, connected directly, through the more horny substance of the cob, with each kernel, thereby forming an

\*H. J. Diffenbaugh is a Pennsylvanian by birth; was educated in the grain business at Dwight, Ill., in the heart of as fine a corn-belt as there is in the world; moved to Washington, Kan., in 1883, and has been operating an elevator there or at near-by stations ever since.



avenue of escape for all excessive moisture not given off through the outer ends and sides of the kernel. Corn can only be properly cured on the cob. But do not forget to figure on the amount of moisture already contained in the cob itself, in the case of fresh gathered corn, in addition to the moisture in the corn itself when calculating on your shrinkage on cribbed corn.

Shelled corn arriving at market centers usually contains moisture as follows: No. 2 corn, from 12 per cent to 16 per cent; No. 3 corn, from 14 per cent to 16 per cent; No. 4 corn, from 16 per cent to 20 per cent. Moisture in corn is contained in each of the numerous starch cells or globules throughout the corn, from the extreme outer parts to the center, and can only be given off through capillary action, caused by free circulation of air for a suitable time at and around the outer surface of the grain, as a dry sponge would take up moisture, say, with suitably heated air, in about eight to ten hours without injury to the grain.

By suitably heating air its moisture absorbing qualities are largely increased—quite a saving in time, as under favorable conditions a much longer time is required if the air is not heated. About thirteen cubic feet of air contains one pound of moisture when fully charged. Air at 60 degrees is capable of absorbing 3 per cent of its own weight of moisture. Air at 160 degrees is capable of absorbing 22 per cent of its own weight of moisture. Hence I claim the many so-called grain driers, which are guaranteed to dry grain perfectly in from five to twenty-five minutes, are, to put it mildly, an imposition forced on the grain trade, and that their very principles are detrimental to correct grain drying without injury to the grain. I say to my friends, go slow when buying a grain drier, as the so-called quick-process grain driers do not absorb the moisture, but by the quick application of an excessive degree of heat in most cases sets the oil of the germ free, causing the corn to be colored or blackened soon and the second or inner membranous skin of the corn to coagulate, thereby searing, or hermetically sealing, the entire second skin, and of course heating the hard, thick outer skin until it appears dry, and is dry, on the outside only for the time being. But all the moisture is contained within the hermetically sealed inner skin and will remain so contained until said seal is broken, possibly in one to six days; then the moisture will, by capillary action appear on the surface. Hence the soft or damp corn run through so-called driers will really inspect on a liberal inspection No. 2 corn. But oh, my, the condition of that very same No. 2 corn a week or two after! Ask any grain man who owns a quick-process grain drier, who has carried corn in elevators or on vessels after drying. Ask the promoters or agents of the so-called grain driers, why they have a cooling process immediately following their drying process, and why a dry substance has to be cooled.

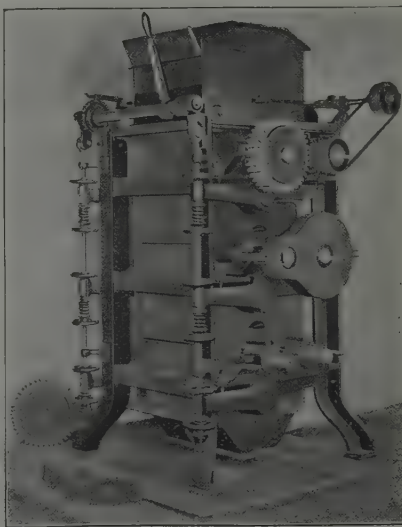
To dry grain successfully without injury to the grain, air and air only is the medium; and, as I said before, to increase the absorbing qualities of air and to save time, I find that suitably heated air, not to exceed 160 degrees, is an advantage; but then it takes time, and the grain should be continuously agitated or moved to equalize the exposure to the heated air, varying from six to twelve hours, according to conditions of the grain and atmosphere. If any of my friends among the grain dealers here assembled are interested and desire further information on the subject of grain drying, I would be pleased to meet or correspond with them relative to same, as I am familiar with the subject.

**How to Test Moisture in Corn.**—Take a small amount of shelled corn, about one pound; grind it fine (a coffee mill will do); weigh the ground corn very accurately on a small, true, delicate scale immediately after grinding. Place it on a small dish or pan, covered with blotting paper, in an oven suitable for baking bread (better set dish or pan on one or more bricks to avoid burning); let it remain in the hot oven with the door open to admit of free circulation of air for about three or four hours. This excessive heat would damage the corn, but in a test for moisture, damage to the corn does no

harm. Remove and weigh it again accurately, to obtain the exact loss by shrinkage. Replace in oven again for one more hour; then remove and weigh accurately again, and if there is no additional loss by shrinkage, you will know that the moisture has all been given off. If an additional loss by shrinkage is shown at the second weighing after drying, replace in the oven again for another hour, reweigh and repeat until there is no further loss or shrinkage. This will give you the exact figures, provided you have weighed accurately each time. The better way to weigh is to get the exact tare, or weight of the dish or plate, say one-half pound, then add one-half pound ground corn or meal; weigh gross meal and dish, say one pound, so as to avoid emptying the dish and spilling the meal when weighing after or during the drying process.

### THE MINNEAPOLIS ROLLER CORN AND FEED MILL.

The accompanying illustration shows the Minneapolis Roller Corn and Feed Mill, which is just being placed on the market by Fred Zollner & Co. of 2435 Twenty-eighth avenue, South, Minneapolis, Minn. It is made in both four-roll and six-roll styles. The cut shows the differential side of a mill using noiseless gears, but belt drives for the slow



MINNEAPOLIS SIX-ROLL CORN AND FEED MILL.

rolls are provided in place of the gears when so desired.

The mill has a strong, well proportioned iron frame, with steel housing. The rolls can be taken out on either side of the machine. The mill has a combined hand wheel and lever adjustment. After the rolls have been properly aligned by the use of the hand wheels, the lever may be used, if desired, for changing the grinding adjustment for coarse or fine grinding.

The adjusting mechanism consists of three bell-crank arms on each side of the machine, carrying the movable rolls. Vertical threaded rods pass through the loose ends of the arms. The end of each arm is held in position on the rod by a hand wheel on the upper side and a coil spring underneath, below which is another hand wheel. The upper ends of the vertical rods are connected to a horizontal rocking shaft which carries a lever and a locking gear. By lifting the lock pawl and, by means of the lever, moving the lock gear one notch, all the rolls are opened or closed one-sixty-fourth of an inch, as the case may be. Turning the lever clear down opens all the rolls one-fourth of an inch. The rolls can be returned to the grinding set again by moving the lever up until the pawl falls in the original notch of the locking gear.

The four-roll mill has the same adjustments as shown in the cut. It can be driven from the basement, from a shaft on the same floor or from the floor above the mill. This arrangement will often permit of a considerable saving in the expense of installing the mill.

Indicators are provided for each pair of rolls, showing whether they are in proper alignment, that is, parallel with each other, both when running and standing.

The mill is surmounted with a force shake feeder and separator combined. It is made of steel and the makers state it will feed anything in the shape of grain, either slow or fast.

### INSTALLATION OF GRAIN DRYERS.

The Underwriters' Bureau of Protective Engineering of Chicago has adopted as standard a series of rules for the installation of grain dryers, recommending their observance in the construction and installation of such apparatus. The offices and laboratories of the Bureau are at 67 East Twenty-first Street, Chicago, and an application there would no doubt secure complete copies, which those about to erect dryers would find valuable at least by way of suggestion. Some extracts from the rules bearing upon the "desirable features" in the design and construction of dryers as tending to reduce the danger from fire to a minimum may, however, be quoted here, although, of course, they seem to go to the limit of extreme precaution. After describing the different types of dryers and pointing out the several elements of fire hazard in connection with dryers in general, the rules continue under the general topic of "desirable features:"

1st. The dryer should be accessible and as open in construction as possible, so as to afford access for the attendant and so that all portions may be reached by fire streams.

2d. The layers of grain through which the hot air is forced should be as thin as practicable, so as to permit the use of air under low pressures and therefore a comparatively slow speed at the fan. The area of grain through which the air passes should be as large as possible for the same reason. [Cases are on record where temporary wood parts of a grain dryer have been charred in one day by concentrated air jets of comparatively high velocity and where the temperatures at the fan were less than 200 degrees Fahrenheit. It would appear from this that small air passages so arranged that the velocity of air is materially increased would have a tendency to overheat the grain and increase the fire hazard.]

3d. The dryer should be self-cleaning and free from all parts liable to fill with dust and dirt. Wire netting is more or less objectionable on account of its liability to clog with dust and chaff.

4th. The air spaces should communicate freely with the outer air by window and ventilator openings so as to afford vent in case of explosion. Ample windows will also reduce the necessity of artificial light and render the apparatus more accessible for outside hose streams.

5th. Provision should be made for quickly withdrawing the grain from the apparatus in case of fire. A spout for draining the grain into the lower or ground floor where fire can be more easily extinguished would answer this purpose, providing it is independent of the spout for reconveying the grain to the elevator. A receiving hopper below the dryer and into which burning grain can be drawn and fire smothered will also answer this purpose.

6th. The division of the dryer into separate compartments is advisable where the separation can be so arranged as to confine a fire or prevent its rapid spread to all portions.

The hazards of dryers are such that they cannot safely be introduced within ordinary elevators without increasing the fire risk of the elevator, the Bureau says; but observance of the following rules makes practicable an installation in close proximity to the elevator in connection with which the dryer is used:

1st. The shaft or building containing the apparatus to be constructed entirely of brick and non-combustible material and located at least six feet away from the elevator.

2d. The roof should be of tile on steel supports so constructed as to afford vent in case of explosion.

3d. The openings in the side walls of the structure above the first floor to open away from the elevator. This is not meant to include the necessary openings for shaft, rope drive or spouts.

4th. The spouts between the elevator and dryer building to be of metal, on metal supports and provided with tight self-closing dampers so arranged as to remain closed except when the grain is passing through them.

5th. The windows to be protected by wire netting.

6th. The structure not to be lighted artificially



except by incandescent electric lights or other approved method.

7th. All parts of the dryer to be constructed of metal or non-combustible material, including the garner, supports, spouts, etc. All parts to be smooth so as to afford little chance for the lodgment of dust and dirt.

8th. Elevating machinery for reconveying the grain to the elevator to be located outside the dryer building.

9th. When the dryer is constructed to operate independently of the machinery in the elevator, the inclosure containing the cables and elevating machinery operating the dryer must be entirely of non-combustible material and must not communicate with either the main building or the dryer building except by spout and cable openings.

10th. The spout leading from the dryer to the machinery for reconveying the grain into storage to be provided with a cut-off slide so that the flow of grain from the dryer can be controlled.

11th. The dryer to be provided with a spout for draining the grain into the lower or ground floor or with a receiving hopper of sufficient size to contain all the grain in the apparatus.

12th. The blower or fan to be entirely of metal and provided with self-oiling bearings.

13th. The blower and steam coils to be located within the walls of the dryer building.

14th. The steam supply and power to be so arranged that they can be independently controlled from outside the dryer building.

15th. No other heat except steam to be used.

Notwithstanding the fact that the grain and foreign matter mixed therewith are the only materials of a combustible nature contained in a structure constructed in accordance with the above regulations, it is believed that a fan-driven fire in this dust and grain would result in considerable damage to the apparatus and possibly to the structure. For this reason the following recommendations for safeguards are appended:

1st. An adequate system of automatic steam jets should be provided for extinguishing fire in the apparatus. High degree automatic sprinklers can be arranged so as to automatically fill the apparatus with steam in case of fire.

2d. If the fan is driven by an independent engine, a system of fusible links should be so arranged that the fusing of any link would close a shut-off valve on the steam connection supplying the engine. Attachments for automatically stopping the fan when the power is from other sources should be provided if practicable.

3. An automatic fire alarm system should be installed, placing alarms in the engine room and at other points if desirable.

4th. A thorough system of automatic sprinklers should be installed when the dryer is used in connection with a sprinklered elevator.

When installed outside the elevator and in accordance with the above regulations, grain dryers of approved construction are considered as adding nothing to the fire hazard of the elevators in connection with which they are used.

## THE LONDON GRAIN MARKET.

Mark Lane is the center of the London grain trade, and one of the busiest marts in all England. Originally there was an open market at Mark's Quay on the site of the present custom house. When that building was erected the grain traders were forced to move, and this they did, to Whitechapel. But ambition pined for a more permanent home, and the present Corn Exchange was built. It was financed by private capital and has been very profitable. The proprietors admitted whom they pleased, to the limit of the capacity of the "stands." Thus it came about that there were insiders and outsiders and consequent rivalry.

The outsiders clamored for recognition, and finally invoked the aid of Parliament to establish a new exchange that should accommodate all interests. So, in 1826, under authority of Parliament, the second exchange came into being, but with shrewd foresight the promoters arranged for possible future amalgamation of both the exchanges. This was finally accomplished, and not only were the exchanges consolidated, but their buildings, which stood adjoining, were remodeled and thrown together, and this is the Mark Lane of the present day.

The business day opens at Mark Lane about 11 o'clock in the morning. Sample bags of grain are passed from hand to hand and examined carefully by intending purchasers. Buyers take their time and

buy cautiously, as a rule. Business formerly closed at half-past 2 in the afternoon. Now the exchange closes at a much later hour.

It is a busy mart, and not infrequently a large share of the trading is done late in the day. Here come millers, merchants, maltsters, farmers and brokers from all parts of England. The railways run special Mark Lane trains on Mondays to accommodate these commercial visitors to the metropolis. It is the grain mart of the United Kingdom.

## THE JOHN WALTERS COMPANY.

Parnell, DeWitt County, is one of those I. C. R. R. towns in Central Illinois which come into existence because the grain which overflows the rich land must find easy outlet. Twenty-five to forty years ago the farmer would haul his stuff twenty-five miles to market and would not dream of complaining at a twelve to fifteen mile haul as much as he does now at one-half that distance. This explains the decadence of some "grain" towns, at the edge, and the rise of new ones, in the heart, of rich farming districts.

The elevator of the picture belongs to the John Walters Company of Parnell, an incorporated company. It was completed in 1898; and within the first eighteen months thereafter the company handled 361,700 bushels of grain through it, and is doing as well or better with the crop of 1899.

The elevator is 28x80 feet in size, with capacity



ELEVATOR OF JOHN WALTERS CO. AT PARNELL, ILL.

of 25,000 bushels. It has three dumps and is equipped for handling both ear and shelled corn. The power is a Webster Gasoline Engine of 10 horse power, which runs the elevator machinery, the corn sheller and also the feed mill. The latest addition to the labor-saving appliances of the plant is a Sterling Car Loader, which, the owners say, "is a great improvement on the old way of loading cars."

## A NEW CORN OIL.

Miss Emma Sickles of Chicago has taken out a patent for making a salad oil from Indian corn; that is, of refining crude corn oil, which is offensive in odor and taste, so that it may be used as a substitute for olive oil. Hitherto the best use corn oil has been put to was as a substitute for linseed oil in paints. This process has been sought by chemists for a long time, but without success.

"I consider that my formula is but another phase of the great utility of corn as an article of food," said Miss Sickles to a Chicago reporter. "It is nutritious and of much greater value than many at present suppose. The process I use is very simple. For instance, I take the crude corn oil, boil it in a porous clay vessel for two or three hours, according to the rancidity. Then, by means of bone charcoal, I filter it through the same kind of clay, which, peculiarly enough, has a different chemical effect when heated, and serves as fuller's earth when cold. That is all there is to it. I can rectify it at a cost of less than 10 cents a gallon by putting into use the same kind of machinery required to purify other oils. At present a person may buy any quantity of the crude product for 25 cents a gallon; when

it has been rectified its value amounts to nearly \$1 for the same quantity." Despite the great consumption of corn by the corn millers, it is said only 2,600,000 gallons of the crude oil finds its way into the field of commerce, the balance being virtually wasted.

## THE GRAIN SHIPPER AND THE RAILROADS.

[From a paper entitled "How Can We Obtain Correct Weights at Terminal Points?" read by O. H. Higgins of Stockton, at the annual meeting of the Kansas Grain Dealers' Association, held at Topeka on March 14 and 15.]

In my opinion, if the sum used in maintaining the the Check-Weight Bureau were used in other directions, we would take many more advance steps than by the present system; but we must maintain this bureau until we provide something better. My remedy is—the railroads themselves. Either have each railroad establish scales, or else have a weighing bureau, with a competent man at the head—not to weigh as railroads usually do, by running the car across the scale, and guessing at the weight, and then taking the stencil figures on the side for the tare, but stop every car, uncouple and weigh, and after the grain is removed bring the car back and weigh it again. The buyer, seller and freight should all settle by that weight. We can demand this of the railroads for two reasons: First, because we are entitled to it; and, second, because it is to their interest.

There is no class of shippers in the state of Kansas that has received as few favors as the country grain dealers. I say this without fear of contradiction. With an investment of from \$1,000 to \$6,000, in their buildings, and a loss of crops during the past six years for one-half the time, they are expected to stand ready to take in grain at all times, furnish storage room for the railroad company, do the loading of that grain without any loading fee, and pay the same rate of freight as the man who has nothing but a scoop shovel to facilitate his loading. While the hog shipper is furnished yards and water and allowance is made for a few shovels of sand in his car, the grain shipper pays twice the freight for a car of grain, while its value is only one-half what the hogs are. Demurrage is charged in the country for every day over two days, while the same car may lie at a terminal elevator from five days to three weeks without charge. While transportation is furnished for one person with every car of hogs, the country grain dealer pays his fare when he travels, as it "conflicts" with the interstate commerce law to furnish him transportation. During a period of twelve years that I have bought grain at Stockton, but one representative of the freight department of the Missouri Pacific Railroad has ever crossed the threshold of my office, and he had a few hours to spare and was killing time.

Out in our country we find it necessary to ship in corn to supply the feeders. This corn comes from 100 miles east and the cars are weighed in transit on a track scale, and we are compelled to pay freight on what a yardmaster or brakeman says that car weighs, no matter what the shipper's weights may be, and no matter what affidavit the man who unloads it makes. The freight is collected on the weight return made by an irresponsible party while that car is moving over a track scale. A grain man told me, the other day, that he saw railroad men weigh a car lately when one set of wheels of the car next to it were on the scales. The tendency of the railroad is to exact from the country shipper a little more than the law allows.

Last September I was notified by our agent that three cars of wheat I had shipped the day before were at Downs, a division point forty-two miles east of us, overloaded. Inquiry revealed the fact that, by the usual process of weighing (running across a track scale), the cars contained 500 pounds, 800 pounds and 1,100 pounds too much, making a total in the three cars of forty bushels. I requested permission to load another car, leaving room to transfer the surplus in the three cars,



and to go down and make the transfer myself. Permission was given to stop a car and transfer just enough to let the three cars go on, but they refused to let me make my own transfer, nor would they allow any reduction from the regular charge. In the course of time, three expense bills came to hand for \$5 each, or \$15, for transferring forty bushels of wheat. I made out a claim, and, in order to save time, sent it direct to the head office. In about three weeks a request was sent for duplicate expense bills, so I asked the Kansas City office for duplicates. I failed to get the duplicates, but I got an expense bill for \$5 on the car I loaded the forty bushels into when it lacked 5,000 pounds of being loaded to its limit. In justice to the railroad I will say that they refunded my \$15. So the strict manner in which the country shipper is held up on every occasion, and the loose methods permitted at terminal points and markets, cannot but create the idea in the mind of the average man that the railroads are silent partners in the transactions.

Now, why will it be to the railroads' interest to correct the weighing? I hold in my hand three weights on a car of wheat. The first weight was my own; and it says that, on January 2, 1900, I weighed the wheat in Missouri Pacific car 17363 and that there were 43,700 pounds. Now, how did I know that was the correct amount? My hopper scales seemed to be working nicely, so I concluded to weigh a car out myself, and be very particular with it, and see how it would come out at the other end. I balanced the scales, ran the wheat up myself, weighed, and saw that every bushel weighed went into the car; and I can assure you that there are no spouts from my hopper into other bins, so I know as well as I know anything, that there were 43,700 pounds in that car. The next weight is reported by H. Cloud, check-weigher at Kansas City. He reports the car in good condition, fast inside, seals E 7 and M. S. L., that the grain was weighed in hopper No. 2 and that the scales show 43,300 pounds, a difference of 400 pounds from my weight. Then comes the statement of John Fernsell, sworn weigher, in which he says: "This is to certify that I have weighed car No. 17363, initial M. P., and found same to contain 43,200 pounds of wheat and no more"—a shrink of 100 pounds while he was making out the ticket. H. Cloud swore to what he saw on the scales. I was short eight bushels and twenty pounds and the railroad was out sixty-four cents in freight. My receiver had printed instructions not to permit my cars to go to that elevator, so they paid me for eight bushels and twenty pounds, but the railroad is still out sixty-four cents.

It has always been a mystery to me why the railroad accepted freight for 100 pounds less than the car contained; but it seems that I have labored under a great mistake; for while I received pay for only 43,200 pounds of wheat in car 17363, and the commission man's statement shows that freight was paid on 43,200, the freight office of the Missouri Pacific informs me that the elevator weight on the car was 43,300 pounds, and that freight was charged on this weight. So this shows that, while the country shipper is docked 100 pounds, the elevator pays the freight on the 100 pounds on the sly to the railroads.

Now, supposing the railroads should refuse to put in scales or suggest any other method of weighing, what are you going to do about it? To you who have no means of knowing what is in your car, I can offer no relief. You will continue to ship and be compelled to accept just what they have a mind to give you; and "May the Lord have mercy on your souls." But to every man who has a hopper scale without plugged weights or spouts, there is a possibility of relief. Listen one moment to the law. [The speaker read from Chapter 100, Session Laws of Kansas of 1893.]

That statute has not been declared unconstitutional yet, so it is still in force. Let twenty grain dealers on any road in Kansas, who have hopper scales, each load a car so that he can make an affidavit of its contents. Let them furnish the affidavits to the agent of the railroad. When you get your returns and find your cars short over one-

fourth of one per cent of what you shipped, present a bill for your shortage to the company, and if it is refused, send it to the attorney of this association for collection. If a contest is necessary, select one case and take it into court; and if it goes in favor of the grain shipper, the present system of weighing will be changed in the "twinkling of an eye," and don't you forget it.

To those members of this Association who are unable to tell the amount of grain they load, I say, get yourselves hopper scales. It will be the best investment you ever made. Don't put in anything less than a 150-bushel scale; but until you are able to tell accurately the quantity of grain in a car, don't make any more complaints about weights.

### O. GANDY & CO.'S ELEVATOR AT SOUTH WHITLEY, IND.

South Whitley is one of the largest oats markets in Northern Indiana, and having direct connections with the Middle East and seaboard markets via the "Nickel Plate" (N. Y., C. & St. L.) road, whose tracks pass the elevator, Gandy & Co. draw grain from a distance of fifteen to twenty miles on account of the better prices they are able to pay than are the towns near them.

The elevator shown in the picture has a storage capacity of 25,000 bushels. It has steam power, and is equipped with modern machinery, including Monitor Oat Clipper of 300 bushels per hour capacity, Monitor Wheat Separator of the same ca-



O. GANDY & CO.'S ELEVATOR AT SOUTH WHITLEY, IND.

capacity, Clipper Clover Seed Cleaners of 100-bushels per hour capacity, as well as corn sheller and Cyclone Dust Collectors. The elevating capacity is 750 bushels per hour. The bin scale weighs a full carload at a single draft.

The present elevator replaces one built by the firm four years ago, which was burned on May 28 last. It is considerably larger than the original house, and business is now increasing so rapidly that they will be compelled to make an enlargement during the coming building season. And they do not store for farmers either.

O. Gandy & Co. deal in wheat, oats, corn and seeds, which are all handled from South Whitley. Their fine outlet to the East has enabled them to build up a direct trade in the feeding districts of the East, and the elevator has been running day and night for nearly the entire time since the crop of 1899 began to move.

Sorghum is rapidly coming into favor as a forage crop, and the University of Nebraska Experiment Station has issued two bulletins devoted to the subject (Nos. 62 and 63). From these it appears that the feeding value of sorghum is greatest when the plant is young and succulent; and also that when pastured on sorghum considerable losses of cattle have occurred. The cause is not known; but apparently some poisonous substance is often developed by the plant while growing, which kills the animal very quickly after eating it.

### MISDESCRIPTION OF GRADE IMMATERIAL.

BY J. L. ROSENBERGER, OF THE CHICAGO BAR.

A bank to which parties operating a public warehouse or elevator had become indebted for overdrafts was given storage tickets, or receipts, in the usual form, for 4,000 bushels of No. 1 Northern wheat, as security. At the time the receipts were delivered the cashier examined the wheat in the warehouse and found that there was at least that quantity of it. From that time on until the warehousemen ceased to operate the warehouse, which was about a month and a half later, they purchased and placed therein and shipped therefrom wheat from time to time, so that when they ceased to operate the warehouse there remained no wheat in it. The bank then sued the Minneapolis firm to which the last 4,000 bushels of wheat in the warehouse were shipped, for \$2,096.27, the value of the bank's alleged special property and interest in said 4,000 bushels of wheat, alleged to have been converted by the firm. The action was dismissed by the District Court, but its judgment was reversed by the Supreme Court of Minnesota (Case of Herick against Barnes, 81 Northwestern Reporter, 526).

The first point which the Minneapolis firm that purchased the wheat sought to make was that the bank never had any title to or interest in the wheat in question. First of all, it pointed out that there was no No. 1 Northern wheat, according to the grade given it at Minneapolis, in the warehouse between the date of the first receipt and the time when all of the wheat remaining in the warehouse was shipped to Minneapolis. Now, if the wheat in the warehouse had been in fact No. 1 Northern, the title to the last 4,000 bushels thereof shipped out of the warehouse, the Supreme Court holds, would have been in the bank by virtue of the receipts. And when it proceeds to take up the question whether it was true that the warehousemen did not have in their warehouse the wheat pledged, it says that the fact that when the wheat in the warehouse reached Minneapolis it did not grade No. 1 Northern, or that it was not, in fact, at any time or place, of such grade, did not justify a negative answer to the question, for the wheat in the warehouse when the receipts were given was the wheat pledged by the warehousemen and intended to be covered by the receipts. The bank's rights, by virtue of its receipts, were precisely as if it had actually deposited the 4,000 bushels in the warehouse and received the storage receipts therefor. Now, if such had been the case, it could not be claimed that the bank lost its title to the wheat and that the warehousemen could sell it and vest title thereto in the purchaser because they had mistakenly or otherwise misdescribed the grade of the wheat in the receipts. So, the Supreme Court holds here that if it was a fact in this case that the storage receipts were intended by the parties thereto to cover the actual wheat owned and held in store in their warehouse by the parties executing the receipts at the time they were issued, then, as between the parties, the misdescription of the grade was immaterial and the title to the wheat then in the warehouse, to the extent of 4,000 bushels, vested in the bank.

Having settled this point, the Supreme Court further holds that the parties to the receipts, after they were issued, were tenants in common in the mass of wheat in the warehouse. The interest of the warehousemen in the mass was limited to the excess of wheat above what was necessary to meet the outstanding receipts. This excess they had a right to ship out and sell. As fast as the wheat was shipped out, and other wheat purchased and added to the common mass, the new wheat took the place of that originally deposited. The warehousemen in this case owned and had a right to ship and sell at all times all of the wheat in the warehouse in excess of 4,000 bushels, the amount called for by the storage receipts; but, when this limit was reached, they had no title to what remained, and could convey none to a purchaser thereof.



Furthermore, the account of the warehousemen being overdrawn when they ceased to operate their warehouse and the receipts being still retained by the bank, the Supreme Court holds that there was no presumption that it consented to the sale of the wheat covered by the receipts. Nor, indeed, does it find conclusive evidence of consent in the fact that the cashier knew that wheat was being shipped from the warehouse, discounted drafts drawn on account thereof, and even urged the warehousemen to ship out wheat, and reduce their account, there being no direct evidence that he knew that the wheat in the warehouse was being reduced below 4,000 bushels, and denied that he knew it.

This interesting Kansas novelty has hitherto been mentioned in the "American Elevator and Grain Trade," but the picture herewith gives a more graphic description of this curious evangelist than can be given with words. It is located at Lebanon, and the owner combines business with soul-saving in this unique manner. The building is the largest



in Lebanon, and the decorations of the "outer walls," for all four are used, are in brilliant colors. The building and the striking appeals to the reader to take timely thought for his soul's future estate may be seen for miles across the prairie from all directions.

The principal theme of the Report of the Kansas State Board of Agriculture for the quarter ending March, 1900, by Secretary F. D. Coburn, is "Forage and Fodders," in which alfalfa, blue grass, brome-grass, clover, the corn plant, Kaffir corn and the other grasses, legumes and kindred plants of Kansas are discussed from the dual point of view of their cultivation and their value as feed. Secretary Coburn's methods in preparing these special reports are so admirable that his reports have long since come to be looked upon as among the most practically valuable documents of their class that we have in the West.

The same season the firm of Evans & Peavey was formed, and this was the beginning of the grain business. Evans owned some farms and wanted a place to store his wheat, so they put up a ware-

Terminal—Peavey, Monarch, Interior and Republic, at Minneapolis; Omaha, at Omaha; Peavey, at

These are some of the things into which has developed that little warehouse of 1871, located down near the corner of Douglas and Second streets, Sioux City, just after Frank Peavey's fire, which had left him owing the world \$1,800.

Those of you who attended the first meetings



of this Association doubtless remember some of the wild and impracticable ideas advanced at that time by some of our members. From some of the passionate utterances of those occasions an innocent listener would at once have been led to class all the railroads in the country as robbers and thieves of the worst stamp, and the Kansas City commission men as a band of brigands only awaiting a chance to hold the grain dealer up and consign him, if not to the tomb, at least to so low a plane financially that he would forever cease to consign grain. And the Kansas City elevators—all of them, without exceptions—Shades of Hades, furnish us a vocabulary—words utterly fail to express the contempt in which they were held. While there were no doubt many causes for complaint, and while evils are still existing to be remedied, yet we must admit they were enlarged upon to a great extent, and many of these evils have materially decreased through the work of the Association. For instance, short weights, without some cause, are rarely heard of, and irregular dealers, what few there are, find the business more unsatisfactory each year.

But the point I wish to emphasize is that, by coming together and comparing experiences, we are not only able to consolidate against an evil, but we individually broaden our ideas and come to see more clearly that there are two sides to every question, and that others have rights as well as ourselves, and that it is possible for us to be in the wrong.

I want to see the day come when the grain business will be looked upon as one of the most respected, and not, as it often is now, a business of sharp practices, where the dealer is regarded, if not a twin brother, at least a third cousin of the lightning-rod agent; and where the farmer often feels that he is defrauded, both in price and weight, and probably at times there is just cause for his feeling. Such a condition is unquestionably brought about largely by undue grasping and avaricious methods of competition; and it is one of the objects of this Association to impress its members with the fact that a single individual or firm cannot do all of the grain business of this country nor even of a single town, but that each should buy on a fair margin that will enable him to give the farmer a fair, square deal and honest weights and leave a reasonable profit for himself.

When the dealers of a town buy on less than a living margin, they are either losing money or they are compelled to resort to some dishonorable practice for their profit. In either case, the result is not satisfactory to the farmer nor to the dealer. While some farmers would gladly see the dealer lose five cents per bushel on his grain, yet with all that is said against the farmer, I find the majority of them are reasonable and expect the dealer to make a fair margin.

Farmer A, a customer of yours, comes in with a load of wheat. He goes to dealer B, who reasons this way: I will not get this load unless I pay more than dealer C, with whom he has been trading, and who will pay all it is worth before he will see a customer leave. Hence dealer B offers 52 cents, or two cents per bushel more than it is worth. The farmer then goes to dealer C, who offers 50 cents, the full market value; but when told by the farmer that he is offered two cents more, he has no plausible reply to make, although he understands the scheme of his competitor, and knows that in the eye of the farmer he is regarded as offering two cents less than the market price. The farmer then sells to dealer B, and when he weighs back and is handed his weight ticket, he imagines his load is short two bushels, and from the treatment he has received he is in a humor to think many things that are not complimentary to the grain dealer and may perhaps give utterance to some choice rhetorical figures that would not sound well in a well-conducted Sunday school.

Now in this instance who has been robbed? Not the farmer, for he has received all his grain was worth, if it was a little light. Not dealer B, in a financial sense, at least, because the load cost him

only what dealer C offered, who figured on a fair margin. But dealer C loses any profit he might have had, or that dealer B might have had, at the same price, and both lose the respect and good standing that ought to be maintained in their trade. This not only makes the farmer dissatisfied but causes strife and bitter feeling to develop between the two dealers. In fact, it is hardly necessary for me to say more, as you all doubtless have had the experience and know how you feel.

When this bitter feeling is engendered between the dealers of a community, they are not only ruining themselves financially, but the high price paid extends its influence to other towns in the county, and from that county to adjoining counties; and the difference is seldom amicably settled by the dealers themselves, but by a third party. I know of no better third party than our Association; first, by preventing such disturbances to the trade by getting our members out to our meetings and educating them along the proper lines of doing business; second, by serving as an arbitrator of difficulties before they have reached an acute stage; if by no other means, I would suggest that a committee be appointed by the Association to go to towns afflicted in this manner and provide some remedy; and, if necessary, where all the dealers of a town are members of the Association, compel an arbitration of differences according to the circumstances and conditions of each locality. Secretary Smiley, I know, has accomplished much along these lines, but with his other work I feel that he cannot do this matter justice throughout the state.

In my opinion, it would be a good idea for the Millers' Association and our Association to work hand in hand; and I see no good reason why this meeting should not appoint a committee to confer with the Millers' Association in an endeavor to bring about such a union. There is now a vast amount of business done between the country grain dealer and the millers throughout the country, and I have often thought that there should be some code of rules governing such transactions and for the settlement of any differences that often arise.

I also believe it would be a wise plan if the National Association should at least be largely made up of delegates selected from our various state organizations and the National Association recognized as the higher power. It is only in this manner that we can hope for any national legislation in our favor, and the only hope we ever will have of securing a clean bill of lading whereby the railroad companies can be held liable for the amount of grain put into a car. I fully realize that many of our members are opposed to affiliating with the various boards of trade, yet I cannot help but think that it would be very beneficial to both organizations and that we can never be entirely free from the irregular dealer until this is accomplished.

By some such complete organization and affiliation all parties, from the producer to the retailer of the finished product, could be brought face to face on any existing differences, which is the quickest, surest and most satisfactory way of securing a mutual understanding and adjusting difficulties. Even if this cannot be brought about, there are many differences arising between the country shippers and dealers at terminal markets concerning which there are now no laws or fixed rules of trade. It is true the various boards of trade have arbitration boards for the settlement of such cases, but from personal experience I know that the country dealer is very loth to submit his case to an arbitration committee composed of gentlemen who, he feels, whether rightly or not, are prejudiced against him at the start.

I go on the principle that an ounce of preventive is worth a pound of cure. Let the grain dealers' organization and the various boards of trade get together by committees or otherwise and map out rules to cover the points on which experience suggests there is likely to be a misunderstanding. Let these rules be printed and distributed to the members of the different organizations or published in

one of the grain journals, so that our membership would be fully informed as to the rules and customs under which they are doing business.

There are perhaps a few timid grain dealers who hesitate to have anything to do with boards of trade and the larger associations, for fear that in some manner they may prove to be a Jonah for another whale. I know it is true, at least I so get it from Republican authority, that the history of the Democratic and Populist parties of Kansas for the past few years is a frightful warning to all attempted affiliations of organizations; but in our case it is not so much whether the outcome be free silver, gold alone, or even greenbacks, so each man gets his legitimate portion of the shakels.

Has it occurred to any of you that we may possibly have outgrown our constitution and by-laws? Just what changes and additions are advisable I am not fully prepared to suggest. But would it not be advisable to appoint a committee to revise our present constitution and by-laws and report the same at our next meeting?

One of the most essential requirements for the Association's success in any effort is unity. We all recall the familiar fable of the seven sticks which, when united were difficult to break, but when separated were easily broken. We are no longer only seven, nor even seven times seven, but if there is an average of seven grain dealers in each county we ought to be a band of seven hundred whose combined wisdom and suggestions would command respect. The first requisite is a determination that all regular grain dealers in the state of Kansas shall become members of our Association; and, second, that all members shall stand united and work solidly together for the accomplishment of any object that they may undertake. Both requisites, gentlemen, are within your grasp. Will you reach out and take hold of them, and, having taken hold, will you hold fast? The answer lies with all of us. With this kind of an organization, I predict a clean bill of lading, an attentive ear on the part of our legislative bodies, an elevator rental from the railroads of so much per bushel for every bushel of grain that passes through a country elevator, not only a possibility but a probability and at no very distant day.

While it would not be wise to impose an unnecessary tax upon our members, I am emphatically of the opinion that to run this Association successfully we should have an income of at least \$12 per year from each member. I know your officials have been handicapped in the past on account of the lack of funds, and had we had any litigation or other unusual contingency we would have been seriously embarrassed. We must expect such contingencies in the future and should prepare for them now. It is to be sincerely hoped that the officials will not be so handicapped in the future, as we yet have a great work to accomplish and must have money to work with. I dare say there are but very few members here who have not been benefited hundreds of dollars yearly by reason of the Association, either directly or indirectly. Where, then, can you place \$12 to \$15 per year to better advantage than by investing it with the Association? Certainly no one would be so unjust and unfair as to refuse the support of that from which they derive so much benefit.

Let us ever keep in view the fact that in this work there is no neutral ground to stand upon. It must be either retrogression or progression. Let us unroll a banner upon which will be emblazoned the large letters "U. & P.," which stand not for Union Pacific nor necessarily for universal peace until we get our rights, but for the watchwords Unity and Progress, and with this banner let us push on to ultimate success.

The agricultural appropriation bill enlarges the free seed allowance at the disposal of Secretary Wilson by \$40,000 for the 1901 distribution.

The daily service of corn and wheat region bulletins by the government began on April 13. The central stations are Chicago, Columbus, Des Moines, Duluth, Indianapolis, Kansas City, Louisville, Omaha and St. Louis.



## Court Decisions

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

### An Agreement Not to Engage in Business of Grain Dealers Is Binding.

An agreement with the purchaser by parties selling their flour and feed business and stock of flour and feed on hand that they will not enter into the business of grain dealers without the consent of the purchaser, the Supreme Court of Michigan holds (case of Buck against Coward and others, 81 Northwestern Reporter, 328), is not void, as in restraint of trade, but binding, even if it does not limit the place in which the parties are not to do business.

### Effect of Measurement on Passing of Title to Hay.

Where grass on the public domain was cut and made into hay that was stacked at a designated place for certain parties whose foreman had agreed to pay a certain price therefor per ton, the Court of Appeals of Colorado holds (case of Young against Minkler, 59 Pacific Reporter, 622) that it was correct to instruct the jury that if it was a part of the contract that the hay was to stand for six weeks and not to be regarded as delivered until measured, then the parties who cut it could not recover payment for it, when it was destroyed by fire within said time after being stacked, and before being measured; but if, on the other hand, the contract was that the hay was to be delivered at a specific place, and it was then accepted by the foreman of the purchasers, and the measurement was simply to ascertain the amount and the value, then the parties who cut it could recover the price, notwithstanding it was burned as just stated. And this last view is the one taken by court and jury in this case, wherein it is held that title passed and the contract price could be recovered in spite of the fact that the hay was burned before the time came when it had been agreed to measure it, and it never was measured.

### Enforceability of Labor's Lien on Wheat Outside of State.

Whether the holder of a statutory lien existing under the statutes of another state, as, for example, the holder of a North Dakota laborer's lien on wheat grown in that state, can, after the property covered thereby has been sold by the owner to a third person and by him removed into Minnesota, lawfully seize the property and effect a foreclosure of his lien within the state of Minnesota, the Supreme Court of Minnesota suggests, is a yet unsettled question. It says, however, that some of the authorities, notably one or two Alabama cases, support the contention that such a lien has no extraterritorial operation and can be enforced only in the state creating it.

On the other hand, the Supreme Court of Minnesota holds that where such owner brings an action, in the state of Minnesota, against such third person, as above mentioned, to recover the purchase price of such property (here it was wheat removed from North Dakota into Minnesota), the holder of a labor lien thereon under the laws of the state, where the wheat was grown, may be interpleaded, or brought into the case by one of the other parties thereto, or he may intervene in the action, that is, bring himself into the case, and assert his rights as fixed by the laws of the state where the lien exists, as fully and to the same extent as though the action was pending in that other state.

In other words, the Supreme Court of Minnesota holds (case of Schuler against the T. M. McCord Co., 81 Northwestern Reporter, 547) that whether the holder of a laborer's lien on wheat grown in another state can foreclose the same, or maintain an action for the conversion of the property covered thereby within the state of Minnesota or not, which it does not here decide, he may, when the proceeds of the wheat have been paid into court in Minnesota, assert his rights thereto under

his lien given him by the laws of the state where the wheat was grown; and if in equity his rights are superior to his rival claimant's, the fund will be awarded to him.

Moreover, the Supreme Court of Minnesota holds that the mere allegation by a party suing in that state that he consigned the wheat in question to the party sued for sale for his account, is insufficient to show that he was the owner of the wheat or that he had any beneficial interest therein, and that, while he might recover as against the consignee, he could not recover against the holder of a laborer's lien given by the laws of another state without showing some title or right superior to the lien, which that so alleged would not be.

### Lien on Subtenant's Crop.

The proposition was advanced in the case of Marrs against Lumpkin, that the written consent of the landlord to his tenant to sublet, and his waiver of the Texas statute against subletting, was a waiver of the landlord's right of lien on the crop raised on the premises and that he must look alone to the original tenant for his rent. Not so, however, thinks the Court of Civil Appeals of Texas. It holds (54 Southwestern Reporter, 775) that the rule is just the reverse of this contention.

The court says that there is here no waiver of rent. The waiver is only to sublet. The crops of the subtenant, or subtenants, in such a case, it holds, will be subject to the landlord's lien for rent to the extent of his claim against the original tenant. The payment of the rent in such a case to the original tenant by the subtenant or subtenants will not release the crop from the landlord's lien. In other words, the crop in such a case may be under a double lien to the original landlord and to the original tenant.

When one rents from a tenant with the landlord's consent, the court goes on to say, he occupies the relation of tenant to the landlord and to the original tenant. If the subtenant in such case pays rent to the landlord, he will be entitled to a credit for the amount paid on the claim of the original tenant against him. The subtenant can protect himself from payment of double rent but not at the expense of the landlord.

To the foregoing the court adds that the landlord can sue for conversion one who converts crops upon which he has a lien for rent. And this is what makes the decision of particular interest to grain dealers.

### Right of Action Where Agents Who Buy Wheat Refuse to Deliver Same.

A grain dealer bringing an action for damages against certain parties alleged, in substance, that he had employed them as his agents to buy wheat for him at a certain place until such agency should be discontinued in some proper and legal way, they to be paid 2½ cents per bushel commission, and to be furnished the money to pay for the wheat so bought whenever they should request the same of him. Continuing, he alleged that they had refused to deliver to him the residue, amounting to some 3,000 bushels of wheat, so bought up to a certain date, as the market price of wheat at their place had advanced some 20 cents a bushel, their purpose being to obtain the advantage and profit to themselves of said advance in the market price of wheat, etc.

The Circuit Court judge took the view that no cause of action was stated. But the Appellate Court of Indiana takes a different view of it, and reverses his judgment (Nading against Howe, 55 Northeastern Reporter, 1032). The court holds that when the wheat had been purchased by the parties referred to as agents of the complainant, it was his property, and he was entitled to make such profit as might be made by sale thereof. It says that it appeared, in substance and effect, from the complaint that the agents immediately after purchasing the wheat refused to deliver it to the complainant and held it as their own, for the purpose of making for themselves the profit which he was entitled to make; and while still holding the wheat and refusing to deliver it they notified him that they would no longer act as his agent.

Now, ordinarily, where the property of one is held by his agent as such, a demand of possession and refusal must be shown to put the agent in the wrong. But demand and refusal, which constitutes evidence of conversion, need not be shown where conversion may be otherwise proved. To show conversion, it is not necessary that it be made to appear that the party sued has sold the property or that he has in any manner disposed of it, so that it is no longer in his possession. The exercise by one of dominion over the property of another to the exclusion of the latter in defiance of his rights constitutes a conversion. And that is the principle the court goes on here.

In the averment of tender in the complaint it was not alleged that the complainant tendered interest from the time of the purchase of the wheat to the date of the tender. The averment was only that he tendered the purchase price of the wheat and the agents' commission on same. But, the court holds, it was not necessary to make a tender of any amount. As before stated, the agreement was that the complainant would furnish money to pay for the wheat whenever the agents should request it of him. The action was not for the recovery of the wheat or of its value, but the complaint went upon the theory that the agents were to retain the wheat, but were liable to the complainant for the profit which he had lost by their conversion of the property to their own use in violation of their obligation under the contract of agency. And taking this view meets with the approval of the court. The amount of this profit, and therefore the measure of damages, it holds, the complainant showed sufficiently by the averments relating to the purchase price and the increase in the market price. To which it adds what it said on a previous occasion: "The law presumes that the market value of a commodity can be obtained. A market price is not speculative nor conjectural."

## THE PHYSIOLOGY OF CORN.

There are male and female organs in corn and the plant is one of the easiest in the world to cross, owing to the fact that these organs of reproduction are separate and not in the same flower. The tassel at the top of a corn stalk is the male organ that furnishes the pollen and the silk of the ears is the female organ. This silk is hollow, and the pollen, falling by nature upon it or placed there in crossing experiments, enters the silk tubes at the exposed end and proceeds through to the cob, where fecundation produces the grain. When crossing experiments are being conducted the tassel is cut from the stalk where the new corn is desired and the pollen from the selected stalk is scattered upon the silk. It is customary, however, to protect the ear, for otherwise pollen may be brought by the wind from adjoining rows of corn or even from a distance and interfere with the plan.—Corn Belt.

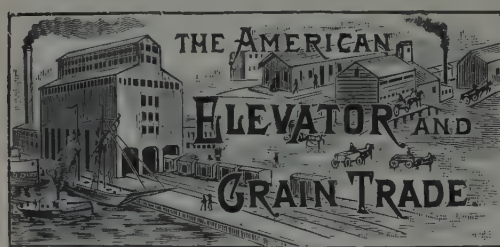
The inspections for the three Washington markets for the calendar year 1899 were as follows:

	Cars Wheat.	Cars Oats.	Cars Barley.
1899—			
Seattle .....	2,906	182	249
Tacoma .....	6,417	188	165
Spokane .....	1,589	213	52
Totals .....	10,912	583	466

Figuring wheat at 754 bushels to the car, oats at 600 bushels, and barley at 600 bushels to the car, Seattle last year received for inspection 2,191-124 bushels of wheat, 109,200 bushels of oats and 149,400 bushels of barley. Tacoma received 4,838-418 bushels of wheat, 112,800 bushels of oats and 99,000 bushels of barley. Spokane received 1,198-106 bushels of wheat, 127,800 bushels of oats and 31,200 bushels of barley. Seattle received a total of 2,449,724 bushels of grain, Tacoma 5,050,218 bushels and Spokane 1,357,106 bushels of grain. The combined receipts of the three cities for 1899 were as follows, in bushels:

Wheat .....	8,227,648
Oats .....	349,800
Barley .....	279,600
Total .....	8,857,048





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### ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

### CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., MAY 15, 1900.

Official Paper of the Illinois Grain Dealers' Association.

## THE MONTREAL SYNDICATE ELEVATORS.

The Canadians are not wholly "without spot or blemish." In the matter of the concessions of elevator and warehouse sites at Montreal to the Connors Syndicate, there was complaint of the so-called American official habit of "jamming things through." The Syndicate found the other day, however, that the American official habit of taking things for granted is not so much in evidence across the line as on this side, even with influential friends at court. When Mr. Connors contracted to build a "3,000,000-bushel elevator" on a given site, it seems the Canadians expected just that thing literally, and they actually object now to the Syndicate's going ahead with plans and specifications for a 1,000,000-bushel house only. Nor does the statement that this is only a working house, to which 2,000,000 bushels of storage capacity is to be added later in separate buildings, entirely satisfy the Harbor Commission as a whole, which sent a delegation to Duluth to examine into that kind of elevator construction and which requires submission of plans and specifications for these additional buildings, also, before anything is approved. This sticking for particulars is quite inopportune, with the company's prospectus just from the press.

This latter suggests C. A. King & Co.'s new definition of trusts—"small bodies of men surrounded by water"—which, by the way, is one of the cleverest epigrams of the season. Out of \$4,000,000 of capital the Syndicate gets \$1,500,000 for services, or ground floor occupancy, leaving the cash capital insufficient,

even if the stock is sold at par and without bonus of any sort, to carry out the engagements of the company without heavy issues of bonds, a million of which it is proposed to issue at once, and the legal balance, \$4,000,000, as needed. Meantime the newspaper friends of Mr. Booth of the Canadian Atlantic Railroad, "about the only railway man in the Dominion who does not look to the government to provide the greater part of the money needed for his railways," may be relied upon to see that Mr. Connors and his friends get no more rights or privileges than the strict letter of their contract gives them. Their contract has never been a popular one in Montreal.

## THE STAMP TAX BURDEN.

The most troublesome and burdensome of the taxes paid by our business men are the stamp duties imposed on commercial transactions. The act of Congress which imposed them two years ago was a war measure, and the people who once revolted from the mother country because of similar duties patriotically acquiesced, knowing that the government needed revenue for extraordinary expenditures. While the imposition of the stamp duties carried annoyance as well as expense with it, and was felt to bear very unevenly on the different classes of the community, protests were few, as everybody felt that the measure was only temporary.

But times have changed. The National Treasury is again overflowing. The government has more money than it needs and naturally the people are clamoring for the repeal of the latest and most obnoxious of the public burdens. Commercial bodies and trade associations are petitioning Congress to wipe out the law, or so much of it as touches their business. W. R. Mumford of Chicago has prepared a petition and the members of the National Hay Association have been urged to sign and forward it to their congressmen. This document briefly states the point of view of grain dealers, commission men and the business world generally. After reciting the existing facts, it asks senators and representatives "to work and vote for the prompt and immediate repeal of the law requiring the use of stamps in connection with commercial transactions."

This does not necessarily mean the abolition of all stamp duties, but if two bites are to be made of the war revenue cherry, this is the first one to take. Stamp duties on articles may be tolerated, but let transactions be free. Take the annoying tax off the grain ticket, the telegram, the bill of lading, the note, the draft, the contract of sale and the dozens of transactions that are now trammelled and hampered. They bear very unevenly, and much harder than many suppose. It costs some people on the exchanges more for stamps than it does to take care of their families. Let the transaction be free. Especially let the products of our great agricultural industry not be taxed and stamped at every turn from Nebraska to New York, and even to Liverpool, for the government follows the stuff and exacts a final "4 cents per \$100 or less" on the final payment. Stir up your congressman on the subject. He'll listen;

nominations and the general election are coming on.

## ILLINOIS GRAIN DEALERS' ASSOCIATION; ANNUAL MEETING.

The annual meeting of the Illinois Grain Dealers' Association will be held at Decatur on Tuesday and Wednesday, June 12 and 13. The committees on arrangements appointed by the directors are as follows:

On Program—E. R. Ulrich Jr., Thos. Costello and H. N. Knight.

On Reception and Commission—J. S. Wiley, A. S. Dumont and B. F. Walter.

On Transportation and Rates—F. M. Pratt, Thos. Costello and T. P. Baxter.

On Mutual Fire Insurance—W. L. Shellabarger, A. Graham and T. P. Baxter.

These committees will meet with the secretary within a few days and prepare the official program. Should members or other dealers desire further detailed information it may be obtained by addressing B. S. Tyler, secretary, at Decatur, Ill. Dealers who attend, when purchasing tickets, should take receipts for the fare paid, as the custom is for the roads to make a rebate on return passage where 100 or more tickets are sold.

At this meeting officers will be elected, and besides this important business other matters of much moment will be brought to the attention of the Association. The usual hospitality of Decatur will be extended, of course, and every dealer in Illinois should make a special effort to be present at the meeting.

## SELLING O. T. OR CONSIGNING.

Until a very few years ago shippers of grain almost invariably sent their stuff to market to be sold on commission for the best price obtainable. Not all grain buyers got rich in those days, but apparently proportionally more of them made money than are willing to confess do so now. It is not necessary to agree to the pessimistic view of the trade to see that, like all other lines of business, grain buying is different from what it formerly was. But since the system of selling in the country has so radically changed it is fair for country dealers to ask themselves how far, among other things, this change of system has affected the conditions of which they complain.

Selling on track is, at least superficially, the easy way of doing business. When the stuff grades all right it is probably the more profitable way of doing business, provided conditions at the country station enable the dealer to buy stuff for what it is and not for what the farmer insists it is, which, of course, is always "No. 2." When everything goes right, in short, the country dealer takes his profit and is satisfied that "on track" selling is the only way to do business.

But suppose "things don't go right," what then? Well, as a rule, the track buyer pockets the losses and the track seller pays them. The track buyer is interested only in his side of the contract. This is not said in derogation. It's a mere statement of fact. If he gets no secret rebate of freights to enable him to make his attractive bids, then he expects to recoup himself and make his profit by the misgrading of



a large part of the stuff sent in on contracts. Aside from his saving of commission fees, he must have this profit to keep going. The profits of hospitaling grain, which go to him, are not a small item by any means, for, as dealers well understand, the difference between grain "on the line" that misses grade and that grades is often so slight that the track buyer's profits on such settlements alone explain in part his ability to make catchy post card bids.

It is the proper business of a commission man, however, to sell grain for its value, especially so when it misses grade. He is for the nonce the shipper's agent, and as a faithful agent it is his business to get out of the consignment its greatest possibility, in contradistinction from the track buyer, whose natural interest in a given consignment is its least possibility to the consignor. This is only business. The commission man, therefore, being on the ground and having himself also a pecuniary interest in making the most of a consignment, takes immediate action to protect the consignor's interest by preventing further deterioration of off stuff and to protect the shipper in matters of inspections, delays, illegitimate shortages and other charges, and the like.

The new Chicago rules are favorable to consignors on commission, and the suggestion, "Sell on track when you must, but consign when you can," is worth thinking over again, even by the confirmed track seller. The commission side of the case is not closed by any manner of means, though very many country dealers seem to think it is.

#### ANOTHER HANLEY SCHEME.

J. C. Hanley of St. Paul has evolved another scheme to enrich the farmers without labor on their part. Quite naturally, it has attracted wide attention—probably because of its extreme simplicity. All there is to it is for the farmer to stop producing; or, if he must needs continue in his sin of successfully cultivating the soil, to hold his stuff "until a certain price is paid." Nothing could be easier—get the "tired feeling" and wait for nothing to rise.

Mr. Hanley's proposition, however, is too easy. That's the trouble with it. Men who see straight have extreme difficulty in understanding how it is possible for mankind to get rich without producing. The good things of this world, at least out of the tropics, do not come out of the air or the ground without somebody's labor. Some of those wicked board of trade farmers do now and then pick up the nimble penny handling "wind" stuff, but that sort of riches is a most uncertain quantity and would keep few from starvation without taking bread from somebody's mouth; whereas, the wealth that is substantial is that which sustains without depriving anyone. That comes only by labor—on the farm or elsewhere.

Mr. Hanley's collateral proposition, that the farmers of the world, that is, of Europe and America, shall unite in one grand, glorious, universal trust, to be operated without capital (barring a pass-the-hat for the managers?), and sell their stuff at the dictation of the central office Pooh Bah is too absurd for consideration. Mr. Hanley's apparent unsophistication

in proposing such a proposition is too much for credence. He can hardly convince the world that he has convinced himself that farmers are "built that way." Mr. Hanley no doubt takes himself seriously. He may mean well. He probably does to himself, especially as his commission from the Farmers' Alliance has expired without renewal, but he must propose something else before he can expect the economic world to tip up in his direction to any alarming extent.

Now, Mr. Barnes, with his Knights of the Soil scheme, is much more to the point, however skeptical one may be of even his ultimate success. His scheme for creating a fund to carry fellow farmers who need such temporary assistance to save their crops from sacrifice sales is not necessarily impracticable, notwithstanding the magnitude of the difficulties that threaten such a scheme in practical operation. The cupidity of men upsets too often the theorizing of speculative altruism, and that danger threatens Mr. Barnes' plans, as it is absolutely destructive of Mr. Hanley's more fantastic imaginings.

#### FATE OF THE CULLOM BILL.

The Cullom Bill, amending the Interstate Commerce Act, was adversely reported by the Senate committee on April 26. It was supposed that the bill would meet the fate of some forty other bills to amend the Interstate Commerce Law that have been presented in Congress during the past five or six years, and be smothered in committee. Indeed, that was the program of the railway members of the committee. They were not even willing that the bill should get before the Senate, even with an adverse report. But one of the opponents of the measure was fair enough to accede to Senator Cullom's request for a report of some kind, so as to get the bill on the calendar, and finally voted to send it back with a recommendation that it do not pass. The recommendation was hardly necessary. Congress will adjourn early in June, and, if necessary, the railway senators will talk the bill to death rather than have a vote on it.

Various pretexts, for they are nothing better, are assigned by the senators who are against the bill for the stand they have taken against a measure which has been so widely indorsed by associations of business men and by leading commercial bodies, like the Chicago Board of Trade. It is claimed, first, that the bill gives too much power to the Commission, and it was urged that it should provide for pooling. The majority of the committee could have amended the bill had they chosen to do so, but they didn't want to. They want the present status of affairs to continue.

And so the decrepit Interstate Commerce Law, which has been shorn of its strength by adverse court decisions, must continue until the pressure of public demand for its rehabilitation becomes too strong to be disregarded. And if signs are not deceptive that time is not far distant in the future. But there may be this difference: The Cullom Bill contains no features hostile to the railroads, aiming only at equity between shippers and localities; the next bill may not be framed in so fair a spirit to the railroads.

#### WRITTEN CONTRACTS WITH FARMERS.

One finds little diversity in the expressed opinions of dealers as to the advisability of using written contracts with farmers for the future delivery of grain. The sentiment that it is wise to do so is nearly unanimous and the only surprise is that the practice of dealers is so largely at variance with what so many have proved to be both a business-like and politic course, for while only a few dealers argue for verbal contracts, a great many use them.

The case is pretty well presented elsewhere in this issue and some good forms of contracts are shown. The question of honesty entirely aside, the written contract prevents misunderstandings. Men often differ on the meaning of a written agreement, and the chances for misunderstanding when the agreement is verbal, and weeks, and perhaps months, have passed, are very much increased.

And after allowing for honest misunderstandings, it must be remembered that the number of men whose "word is as good as their bond" is not quite so large as the poll list. It is true that in most cases it is hardly worth while to go after the farmer who breaks either his word or his contract. But that is hardly an argument for the verbal contract. For, if the price goes down the elevator man will hardly need capias to get his farmers in. But, if the price goes up—well, farmers have been known to forget all about an agreement. The verbal contract is one-sided; it is as good for the farmer as a written contract ordinarily, but it is not quite so good to the dealer. It always has the possibility of a "heads you lose, tails I win" when interpreted by an unscrupulous farmer. The written contract is definite; it is an evidence of the good faith of both parties. It is wise to use it as self-protection. No fair-minded farmer will object to it, and the farmer who is not fair-minded needs a contract to keep him straight.

As a step toward uniformity of grading, Inspector Robinson of Galveston recently had a conference with the inspector and grain exporters of New Orleans, the result of which was, as we are told, an agreement to hold another conference in August at Kansas City, to which representative grain men of the Gulf ports and of the West generally will be invited. It is then intended to create, if possible, a uniform system for grading the grain seeking an outlet at the Gulf ports. Any steps toward uniformity that may be practicable in operation are certainly to be encouraged. That in New Orleans at this time an ex-inspector is seeking redress through the courts, on the ground that he was discharged through the influence of exporters whose grain, while being loaded into vessel, he inspected higher than they desired, has nothing to do with a movement toward uniformity, for whether the grain exported be graded uniformly good or uniformly bad makes little difference, provided it is and continues graded and certified uniformly for what it is represented to be. The foreign buyer can adjust himself to almost anything in the way of a grade when he is compelled to adjust himself to something that is definite.



# EDITORIAL MENTION

The Chicago Board seems to think the new rules are no mistake.

Don't figure on overage. It's more popular, but not so commonplace, as shortage.

Competitors have rights, but it often costs some men a good deal of money to find it out.

There is plenty of lake tonnage and grain freights to Buffalo should rule low this season.

The Texas Grain Dealers' Association holds its annual meeting at Fort Worth on May 15 and 16.

Kansas City shippers want relief from freight rate discriminations. There are others—even in Kansas.

The bucket shop has not wholly disappeared from town, but in the country it is nearly as plenty as strawberries.

The corn cribs of Iowa on the railroads are empty, but many feeders are still paying more than the dealers can afford to pay for corn.

The Eastern Indiana Grain Dealers' Association will meet at the office of Wellington's Flour Mill, at Anderson, Ind., at 2 o'clock p. m., May 17.

Line managers who want honest agents should not expect so much of them that they must be dishonest somewhere in order to "keep even with their pay."

The grain men at Cincinnati are again agitating weighing reform in that city—the question of official weighers and jumbo scales. Reforms never come too soon.

"What Jesus would do" in a printing office is still a mooted question, but it's a safe remark that He would not run a grain business after the manner of some grain buyers of these days.

It is no answer that American freight rates are about one-eighth of those in Great Britain and less than two-thirds of those of Germany; the question is, are the rates fair? And, above all, are they uniform to all shippers?

The second annual New York State Commerce Convention will be held at Syracuse on June 6 and 7. Among the topics underlined for discussion are the state canal system and its improvement, canal terminal facilities, grain elevation, etc.

The line of fire insurance carried by Armour & Co. is enormous. Every dollar's worth of property they own is insured, and this branch of their business alone requires the services of a first-class insurance man. If the statement that the fire underwriters have failed to make any money on the Armour business is credited

it will go a long way toward explaining why Armour & Co. do not choose to insure their own risks.

The use of the letters "O. K." as signifying "all right" or "correct" has been legally indorsed by the Appellate Court of Illinois, the court saying "the definition undoubtedly gives that which is the universal understanding and conception" of the symbol.

Miller, of the Franklin Syndicate of New York, a "get-rich-quick" shop, is not yet in the pen, although he seems to be on the road, with only a few legal stumps in the way. Is that the reason why the others of the same sort still continue to do a profitable business, both in the East and West? Is this "awful example" to be a failure after all?

The new trading rules at Chicago have proved so satisfactory so far that at both New York and Philadelphia the movement for general uniformity at all the exchanges has received new strength. Certain legal difficulties in Illinois are the real obstacle in the way of interstate uniformity at present, but a way to avoid this rock may yet be devised.

The removal of the Canadian duty on corn has proved very satisfactory. Canada grows but little corn, but for all that objection was raised to this invasion of the protective system. It appears, however, that farmers who raise corn are now receiving nearly 10 cents a bushel more for it with corn on the free list than they did when it was on the duty list three years ago.

After July 1 next Chicago, New York, Milwaukee, and probably other markets reporting "visible supply" will include in their totals all grain actually in sight—that in private as well as in regular elevators. It always has seemed absurd that the computation of "visible supply," so-called, should deliberately omit the often immense volume of grain in irregular houses, but then *raison d'être* of many trade customs and practices is often past finding out.

The Buffalo elevator pool has been reorganized for this season on substantially the terms of last year's pool. Rates will be the same as last year, to wit, one-half cent for elevation and loading, with ten days' storage and one-fourth cent for each additional ten days or part thereof. The service of the pool last year seems to have been satisfactory to all interested, save the Erie Canal and its friends and patrons, who then accused, as they do now, the pool of hostility to that important waterway.

Lake freights on grain, which at the opening of navigation were strong, with a scarcity of vessel room, have dropped materially, both at Duluth and Chicago. The bulk of the early movement, with its pressure for space, was over by the 10th of May, and it is found the increase of tonnage on the lake has been more than ample to take care of the freight offered. It is even said that as early as May 6 the Rockefeller interests had 2,000,000 tons of shipping in excess of demand for the ore trade that would naturally be available for grain and

other lines. Rates of 3 cents on wheat, Duluth to Lake Erie, and 2 cents on corn, Chicago to Lake Erie, in force May 6, are not expected to be exceeded during the season, except, perhaps, at the close.

The April crop report from Kansas puts that remarkable state "in the public eye" again. A state with a wheat condition of 99.7 is really entitled to distinguished consideration. And when we add that, as claimed by a recent writer, the state has now on hand more corn than at any time in the last five years, one wonders what to expect next from the Sunflower State.

Cleaning grain pays. Cleaning in the country pays the country elevator; cleaning in the city pays the terminal elevator. Don't pay freight on dirt; keep the screenings at home and feed them yourself. One-quarter of the "just-missed-the-grade" stuff misses the grade for want of cleaning and conditioning. Why not pocket the profit in the handling yourself instead of giving it to the terminal elevator?

One of the largest recent life insurance policies is one of \$1,000,000, issued by the New York Mutual Life to Frank H. Peavey of Minneapolis. The premium was over \$50,000. Mr. Peavey is now 50 years of age, and is to be congratulated on the good health evidenced by the placing of so much insurance on his life. Mr. Peavey is on record as having taken out over \$150,000 of similar insurance in other companies during the past five years.

An Illinois subscriber sends us the business obituary of a Livingston County grain dealer, who transferred his elevators and the book accounts, contracts, etc., of his grain business, as well as house and lot, leases, etc., for a nominal consideration to settle his debts. The comment was brief but pointed: "Overbidding and free storage." Not "as wide as a church door" nor "as deep as a well," but enough, as Mercutio said, when he, too, got his quietus.

The mystery of the plot to destroy the Welland Canal has not yet been divulged, although it is now stated that the officials are in possession of the history of the prisoners and the animus of the plot. It is hardly complimentary to Canadian acumen that they should jump at the conclusion, which was done at first, that the plot originated among the grain handlers of Buffalo. The origin of the affair will doubtless be found in the brain of some political crank.

Chicago grain shippers and others directly interested in Chicago River shipping interests have at last awakened to the fact that those interests are in serious danger. The "logic of events" was not so clamorous until the opening of the drainage canal reduced the depth of water on top of the tunnels; then it suddenly became clear, what had long been apparent, that the harbor at South Chicago, and the new harbors at Waukegan, the beneficiary of the "Outer Belt Line," and at Kenosha, at both of which latter ports large grain elevators are to be built this season, are diverting trade from the river. The only remedy is a deepening of the river and a lowering of the tunnels, the



limit of draft of grain-laden vessels loaded above La Salle street being now but 16½ feet. It remains to be seen who will control the river—the street railways who use the tunnels or the shipping interests.

The Erie Canal starts the 1900 season like a runner with a "game leg." Grain shipments from Buffalo for April 30 were, by rail, 1,520,000 bushels; by canal, 52,462 bushels; excess by rail, 1,467,538 bushels. For a week the proportions were 4,641,000 bushels by rail and 167,869 bushels by canal. Anti-canal newspapers take occasion on this showing to rap the canal improvement schemes; and superficially their position is a strong one. But it is so only by the same sort of reasoning that declares a man with a sprained ankle to be physically incapacitated for all time for racing with a well man.

The grain inspection committee of the Cincinnati Chamber of Commerce was shocked the other day to find that a car of wheat inspected out of Chicago as No. 2 went "rejected" at Cincinnati, and a few days later the same thing happened with oats, and yet the standards are practically the same. They couldn't understand it. Law, bless you, man, that's nothing. Goin' and comin's different, can't you see? Besides that, nobody expects to fathom the mysteries of inspection here below. That's going to be one of the occupations of grain men through all eternity. It will keep them out of worse mischief.

One of the most remarkable cases of embezzlement by trusted employes has been reported from a town in the Northwest, in which a milling company was the victim. It appears that the mill's weigher conspired with two local grain dealers to weigh "long" the wheat they sold to the mill and divide the profits. This sort of thing continued for a long time, or until the "long-age" amounted to about \$30,000. The curious thing about it all was not so much the audacity of the scheme as the delay in its discovery. The mill was doing a large business on apparently profitable terms; nevertheless it could make no money nor find the cause until an expert showed that the production of flour was not in proportion to the quantity of wheat paid for. The culprits refunded to save themselves from a prosecution, but the incident shows how easy it is for leaks to obtain and how necessary it is to keep an eye on every detail of one's business.

The English employers' liability act, although a sharp departure from the old conservative English practice, is being firmly sustained, so that there as well as in certain American states the courts are rapidly formulating the principles of the relations of employers and employes in the direction of narrowing the limits of the employers' freedom from liability in case of accident. For example, in Glasgow, a workman employed to grease the machinery of an elevator marine leg thirty feet high was killed. It was contended by the defendant that the elevator in question was not a "factory," but the court held that, "while the machinery was placed partly on the vessel and partly on the quay, yet it was complete in

itself and, therefore, the employment of the deceased fell within the scope of the act." There is, indeed, only one sure protection for employers from loss in this direction, and that is sufficient liability insurance against such responsibility.

The Cincinnati Price Current's Statistical for 1900 came to hand as a supplement to the regular number for May 3. It is only necessary to add that, as usual, it is a complete statistical summary of the live stock and grain business of the country for the year past. For over fifty years the Price Current has been an authoritative exponent of the grain, provisions and live stock trades, which every year becomes more and more indispensable to those interested in them, and this book compresses the year into one handy reference volume.

Percy B. Sullivan, who has been writing elevator insurance in the country below the rate, calling himself the Grain Dealers' Club, has run up against the state insurance department, it appearing he has been working without a license. Recently one of his policies was unearthed at Kankakee, on the strength of which he will be prosecuted. The insurance journals cite Mr. Sullivan as one of the modern "Napoleons of Finance" gone wrong, and although but 28 years of age, they claim he has a record for sharp practice considerably larger than the Puritan moral law. How many grain men were bitten by him we have no means of knowing; not many, we hope.

It is quite noteworthy that while cheap power in small multiples is now more easily obtainable than ever before, the small steam engine is rather losing than gaining ground. On the other hand, the gas and gasoline engine and the electric motor have all been so much improved that a choice among these is more a matter of expediency than of special efficiency. The influence of this availability of cheap power upon the small manufactures of the country would make an interesting study, not, however, entirely apropos here, except in so far as to say that the country elevator man who inflicts upon himself the small steam engine, to the rejection of the gas, gasoline or electric motor, is a fit subject of commiseration.

The recent decision of the United States Supreme Court, overruling a decision of the Illinois Supreme Court, which sustained a law requiring all railway trains to be stopped at county seats, is, perhaps, of more comfort to the railroads than it is interesting to the general public. It is noteworthy in one respect, to wit, that it sets aside the historic rule in the United States Supreme Court, that that court would not overrule the decisions of state appellate courts passing on purely state law. That the United States Supreme Court has done so in this instance and taken, as a railroad commentator says, "the broader view that the interests of the whole country are paramount" to those of a locality, is evidence of the certainty with which decisions of the national courts, on commercial, and especially railway, law, are obliterating state lines, and emphasizes the necessity of obtaining a firmer

control by the public, through some national body like the Commerce Commission, of railway management.

The government crop report man has started in to get himself disliked again, not simply because his reports have started bearish, but because of his statement that it is the government's practice to add 10 per cent to the estimate on the wheat area as reported by its correspondents. This admission rather puts the climax on a system that is at best open to serious question. If it is all guess work anyhow, why are not the correspondents' guesses as good as that of the statistician? At any rate, as Mr. W. T. Baker of Chicago says, when the reports are published they should state how much is the statistician's guess and how much is the correspondents'. The public might then take its choice.

The statement of various newspapers in America that the famine in India is not caused by an actual scarcity of food, but rather to a "corner" in the breadstuffs market there, is not warranted, if the statement of United States Consul Fee at Bombay be true. He reports to our state department that the rainfall of the southwest, or June monsoon, last year was scarcely half the normal (100 inches), and that the famine then threatened was made certain by the failure of the northeast monsoon in November to save the fall crops. Contributors to the grain cargo of the Quito (200,000 bushels), which has just sailed from New York under direction of our government, need have no fear that their donations will relieve distress caused by swine in the grain trade of India, of whom, in fact, there is little positive evidence beyond the normal in all countries under similar circumstances. Indeed, the charity both of individuals and of the Indian government at this time is worthy of all commendation.

The acquittal of an Illinois grain buyer, acting as agent of a Chicago firm, of a charge of embezzlement, is not without a moral. His accounts did not square with those of the main office, and some debts due to farmers had to be settled by the principals, although they had previously forwarded funds to their agent for the purpose, and his case did look badly for him. It appeared on the trial, however, that the agent, like various predecessors in the same place, had been "holding the bag" right along. He must, of course, follow the custom of the trade in the country and pay a first-class price for stuff grading on the wagon so near the line that naturally it inspected off in Chicago, and the agent had to make up the difference out of his own pocket. Then he had to make up all shortages or steal them from the farmers, and so on. In fact, the unfairness of his position was so well understood by his fellow townsmen that they all but met him with a band of music as the arriving "conquering hero" on his return from the county seat a free man, although the county seat papers following his trial intimate that the prosecution so well proved their side of the case that only the "sympathy racket" saved the defendant. When the people and farmers with whom the defendant did business cite a line of



no less than eight or nine predecessors of the defendant, all of whom lost money and some reputation in exactly the same way, in that town, while buying corn on the same terms, they expressed their feelings that someone else should pay the piper for a while. In cases like these the agent is pretty nearly defenseless, and the system under which he works is not without its influence in creating actual as well as constructive embezzlement in the majority of cases where irregularities come to light. The reform should begin at the top.

The utilization of offals is one of the most interesting features of modern manufacturing establishments, such as the packing houses, the petroleum refineries, and, more lately, the cereal or corn mills. These show how much science has added to the value of the original raw materials. While at the same time, as in the case of prepared feeds, science has been called on to tell the feeder how to get the best results by the "balance ration"—a "new-fangled" notion that the money-making dairymen and breeders of stock or poultry nowadays lay so much store by. The American Cereal Company's little handbooks are particularly interesting in this direction and show to what extent the theory of scientific feeding has been developed in order to make a market for the enormous wastage of modern corn milling. How much of the value of these gets to the grower in an increased price for grain is not, of course, known, but doubtless it is something, as it is estimated to be in the case of stock.

After all, it does seem somewhat ridiculous to be making so much fuss about our new cereal trade in the Orient, for while it relieves the flour congestion on the Pacific Coast, as a matter of fact the Asiatic trade has never amounted to much, if any, over 1 per cent of our total farm exports. On the other hand, the British Islands, Germany and France took no less than 442 out of 664 million dollars' worth of farm products exported annually during the past five years. This trade is worth cultivating, yet so far as appears no effort is being made by our government to head off the proposed increase of the German duty on American wheat from 22.7 cents per bushel to about 39 cents, or the increase of the present corn duty of 9.7 cents. If this last were increased in the same proportion as the wheat duty, it would be 16.6 cents per bushel. The German outlet for our corn has been of mutual benefit of late years, and any official effort to maintain at least the present duties would be worth more than many commissions to China.

It is an interesting commentary on the times and the "customs of the country" that the Equitable Tax Association of America has been licensed by the state of Illinois to organize, with capital of \$100,000, the objects of the company being to secure for its members primarily (and the public secondarily?) "just and equal railroad rates," etc. It is said the Association means to assist the Interstate Commerce Commission and the state railroad commissions in enforcing the laws under which they are acting, as well as to exploit the passage of laws to compel corporate interests and individuals to pay their just proportion of di-

rect taxation. These purposes would appear to the citizen to be the official duty of the national and state executives, but what between the politicians and "that tired feeling" on "the force," which comes on in the spring and hangs on all through the fall and winter, this particular duty seems to have been side-tracked, so that the Equitable is not so much an anachronism as it might seem at first blush.

The report comes in from Northern Indiana that the farmers who went to the last Legislature of that state and had 68 pounds made a legal bushel of corn (instead of 70) a month earlier than the custom of the trade made that weight a bushel, are about, or, at least, threaten, to appeal to the courts to compel grain dealers to pay them the price of 70 pounds of corn for 68 pounds delivered. The dealers, without violating the law, ceased for the time to buy by the bushel, but paid so much cash for 70 pounds of corn, which the said farmers call "an evasion of the law." This seems to be simply a case, not of the biter bitten, but the biter prevented from biting. The farmer in the Legislature was not unaware, nor is the farmer to-day, that those extra two pounds in December are water which soon disappears from the corn as vapor, and the attempt to make the grain buyer pay cash for it was only a petty attempt to get something for nothing, which was as reprehensible as it proves in practice to have been ineffectual.

#### KANSAS RECEIVERS AND SHIPPERS.

Generally speaking, one of the most encouraging signs of the times is the spirit of mutual helpfulness manifested by manufacturers and jobbers toward retailers, by receivers toward shippers, etc. The tendency of the two extremes, so to say, to unite in the same organization has grown out of the belief that through legitimate organization only can any effective remedies for trade evils come.

Perhaps the only exception to this rule is seen in Kansas City, where the Board of Trade has recently renewed its rule, made effective last year, that its members shall not be members of the Kansas Grain Dealers' Association nor contribute to its support directly or indirectly.

The Kansas City Board of Trade followed up the readoption of this rule by a resolution protesting against the insinuation of the daily press that it has aught but the keenest friendship for the Kansas Association, and we may well believe this, seeing that the Kansas City receivers get their living and profit mainly out of Kansas shippers, and more particularly because the officers of the Kansas Association corroborate the statement that there is not the slightest friction between the two bodies.

But, candidly, between us three, including the fence post, we never could quite understand the animus of the Kansas City Board's rule, except on the supposition, which is, of course, open to objection as the emanation of a selfish mind, that the Kansas City members are not wholly en rapport with the "putting up" side of the Association's good work, however much they appreciate the other side.

## Trade Notes

The Vilter Mfg. Co. of Milwaukee will build a two-story brick addition to their machine shop.

The next annual meeting of the National Association of Gas Engine Manufacturers will be held in Pittsburg on September 13.

Seeley, Son & Co., the elevator architects and builders of Fremont, Neb., report that the prospect is very favorable for a good season's work in their line.

The Girard Boiler & Mfg. Co. is to be incorporated with a capital stock of \$50,000. It will establish a plant at Girard, Ohio, for the manufacture of boilers, tanks and steel plates for grain elevators.

The Downie-Wright Mfg. Co., York, Neb., report business as being very satisfactory. They are increasing their capacity by installing more very heavy machinery in their machine and sheet iron departments.

Eugene Brown has opened a factory at Colfax, Wash., for the manufacture of his recently invented sack elevator. This machine is said to be proving a great labor saver, especially in the Pacific Coast states, where nearly all grain is handled in bags.

The Northern Engineering Works, Detroit, Mich., have sent us a copy of their new catalog No. 101. It is of standard size, 6x9 inches, and illustrates and describes their Peerless Vertical Gas Engine. This engine is of very compact construction and has the appearance of being built strictly for business.

Mr. W. C. Barbeau, son of President L. E. Barbeau, of The S. Howes Co., sailed for Europe a couple of weeks ago. He expects to make an extended trip through Europe in the interest of Eureka Grain Cleaners. The company report that their business is good and the outlook at home and abroad very promising.

James J. Gerber, Minneapolis, Minn., manufacturer of the Haven Grain Distributing Spout and the J. J. Gerber Distributing Spout, and elevator spouting of all descriptions, has moved into his new brick building at 128 Sixth Avenue South, where he has ample room and facilities for taking care of the increased business that has been coming in since the first of the year.

The Invincible Grain Cleaner Co., Silver Creek, N. Y., write that owing to many orders and requests for early shipments their works are now running on 13 hours' time. Business is rapidly increasing and in addition to the long day they have placed a number of new tools and appliances for increasing the output so that they are able to insure their customers that all orders will receive prompt and careful attention.

In a neat catalog of thirty-six pages Moore & Lorenz, Chicago, are sending out to the trade an indexed price list of their grain handling machinery specialties. All the elevator buckets, conveyor boxes, boots, heads, etc., are shown by full-sized cuts and special attention is given to the M. & L. Conveyor and the M. & L. Conveyor Hanger, on which last device the firm has just been granted a patent. It will be mailed free on application.

At the recent annual meeting of the stockholders and directors of the Marseilles Mfg. Co., Marseilles, Ill., the following officers were elected: J. Q. Adams, president; H. R. Adams, vice-president; C. H. Adams, secretary and treasurer; H. B. McKahin, assistant secretary and treasurer; A. T. Adams, superintendent. The sales for the past year were the largest in the history of the business and the general results of the year were entirely satisfactory to both directors and stockholders.

The Link Belt Machinery Co., Chicago, announces that the great increase in its regular lines of manufacture, in which it has been engaged for 20 years, and the greatly increased demand for electric mining and haulage machinery together have exceeded the capacity of its plant, making it advisable for them to retire from the manufacture of electrical machinery. The company therefore has sold to



the Goodman Mfg. Co. the patents, patterns, stock and good will of the part of its business known as the electrical mining machinery department. The new company, with H. E. Goodman as general manager and Chas. E. Davis as superintendent, will continue the manufacture of the "Link Belt" electrical mining machinery and specialties.

C. D. Holbrook & Co., 305 South Third Street, Minneapolis, Minn., have taken the building adjoining, which they use for storage room and for displaying gas and gasoline engines, of which they carry about seventy-five of the Charter and Coffield make, ranging in sizes from 1 to 50 horse power. In addition to the new room the company occupies the Standard warehouse at Third Avenue North and Third Street, so that they have plenty of room for the large stock of engines, scales and elevator supplies that they carry.

Monier Constructions is the title of a 40-page booklet issued by E. Lee Heidenreich, Rookery building, Chicago. It is an illustrated treatise of the Monier system of constructing grain tanks, elevators and an almost unlimited number of things, but which has thus far been made but little use of in this country. This construction employs two materials—wrought iron or steel, and mortar, the latter consisting of cement and sand, or cement, sand and broken stone. The larger rods used are called carrying rods, and these are interwoven with smaller ones known as distributing rods, forming a netting with meshes varying according to the requirements of the construction from, say, 2 inches to 10 inches square. The system is patented, and Mr. Heidenreich is the sole representative for the United States.

The Otto Gas Engine Works of Philadelphia, manufacturers of the well-known Otto Gas Engine, report such rapid increase of business as to incapacitate them from the prompt filling of orders—they having found it necessary, in fact, to turn down several large orders. To enable them to fill their orders punctually, they have made some very large additions to their plant. They now occupy the entire frontage from Thirty-second to Thirty-third Street, thus securing ample room to double their capacity and to meet the growing demands for their gas engine. They have thoroughly equipped their plant with all the most modern improvements, including a telephone service. They have now in the course of erection several of the largest gas engines they have ever produced, ranging to 150 horse power.

The Huntley Mfg. Co., Silver Creek, N. Y., manufacturers of the Monitor Grain Cleaning machinery, report large and increasing sales of machines for elevator work. They also state that the work now required of machines in modern grain elevators is more exacting, and the bulk of machines built during the past two years were nearly all built special for making separations that is bringing the cleaning of grain and the handling of offal down to a scientific basis. Flax machines, oat clippers, smutters, and specially constructed warehouse separators are most in demand. The large Great Northern Steel Elevator, now in course of construction at Duluth, is to be equipped with Monitor machines of largest size and latest patterns, 40 in number. This order, with several other large ones for the Northwest, being placed with their northwestern agent, Mr. A. F. Shuler of Minneapolis.

The Steel Storage & Elevator Construction Co. of Buffalo, N. Y., write us that they have just been awarded a contract by the American Linseed Company for a steel elevator to be erected on Staten Island, N. Y. The plant is to have storage capacity of 800,000 bushels; the storage tanks to be 73 feet diameter by 65 feet high. A 90-foot steel head house will house the handling machinery, which consists of four sets of scales, six elevators, special machines equipped with electric power throughout, and two marine legs. A steel belt gallery, 22 feet wide and 275 feet long, supported by steel posts 75 feet high, will accommodate the belts for delivering grain to the tanks. When the plant is completed it will be positively fire proof, and the most modern storage elevator in New York harbor. They have

also just been awarded a contract by Theodore H. Waterman of Albany, N. Y., for a 50,000-bushel pneumatic mill storage plant, to be erected in connection with the new Waterman Mill at Albany.

H. Channon & Co. of Chicago, among recently published literature on Ajax Transmission Rope, have selected a few testimonials from among many received which they have embodied in a neat pamphlet for mailing to the trade. Judging from the testimonials, Ajax Rope stands in very high favor with its users. One of the company's recent foreign orders was a duplicate order for a large shipment of rope to the Manchester Ship Canal Elevator at Manchester, England.

### MOVING AN ELEVATOR BY WATER.

On May 11 many citizens of Chicago witnessed the novel sight of a grain elevator being moved on a barge several miles down the Chicago River. From Goose island to Western Avenue and West Twenty-fourth Street was the journey made by the elevator, and along the whole trip crowds of wondering spectators were attracted.

The elevator formerly stood on the north branch canal near Halsted Street bridge. It was of 60,000 bushels' capacity, and used for cleaning and storing oats. John Range & Son, who had sold their south-branch property to the McCormick Reaper Works, bought the elevator. They had land at Western Avenue and Twenty-fourth Street. They desired to effect a union between the two properties, and John Range confided his needs to Henry Kruger, a mover. The latter put rollers under the elevator, hauled it over to the river, and slid it onto a big scow. The elevator weighed in the neighborhood of 150 tons, but the scow was a big one, capable of carrying 500 tons.

The Canadian railways have made 40,000 pounds the minimum carload for wheat, corn, barley, pearl barley and rye; and 35,000 pounds for oats and buckwheat. Unless the marked capacity of the car is less in each case, the minimum weight will be 10 per cent above the marked capacity, but not lower than 24,000 pounds.

H. H. Hagan, who has large farming and cattle interests in Oklahoma, has kept a record of the dates in each year, commencing with 1894, on which wheat has been ready for harvest. In this table, 1895, in which there was practically no wheat crop, is omitted. The other dates are: 1894, May 29; 1895, May 26; 1897, June 7; 1898, June 13; 1899, June 12. Mr. Hagan says that at no past time has the outlook been so promising for an early harvest as at the present time.

J. H. Beagley of Sibley, Ill., who, as secretary of the Illinois Corn Growers' Association, originated the score card for judging corn, says: "A perfect ear should be 10 inches in length and 7½ inches in circumference; should yield 90 per cent of grain; should be cylindrical in form and carry its size the entire length, except at the point, where it should taper slightly. It should be well filled at both ends. In scoring an ear of corn there are ten properties to be considered, viz.: Uniformity of exhibit, shape of ear, purity of color in grain and cob, ripeness, filling out ends, perfection and uniformity of grain, length of ear, circumference of ear, space between rows, and proportion of grain."

Farmers of Berrien County, Mich., are trying an experiment with a new grain which they have imported from Germany. It is described as a cross between oats and wheat and is expected to flourish where the latter fails. This may be the same grain as that imported by M. J. Shields, of Moscow, Idaho, and of which he intends to sow 500 acres this year. This is described as having a kernel three-quarters of an inch long, with the appearance of rye, and making a meal which resembles that of corn. It is claimed that it takes the place of corn, and will yield double the amount that wheat yields. The straw makes an excellent fodder, and the grain matures earlier than wheat. It is similar to the German raggen, and contains 47 per cent of gluten.

### ..Points and Figures..

The smallest yield of corn for a given state in 1899 was in Montana.

It is stated at Minneapolis that E. C. Warner will build a 40-press oil mill in that city to work the growing crop of flax.

New arrangements for local grain storage and delivery at Philadelphia are about to be made by Pennsylvania Railroad officials and the Commercial Exchange. This is made necessary by the tearing down of the West Philadelphia Grain Depot.

A project is on foot in Chicago to establish a direct line of steamers from Chicago to Liverpool. The largest ships that can pass the Welland Canal would be capable of carrying 75,000 bushels of wheat on a draft of fourteen feet, and some 3,500 tons on a full draft.

The Southern Interstate Fair Association of Atlanta, Ga., has offered the following prizes to farmers: Two hundred and fifty dollars for the best bushel of wheat; \$250 for the best bushel of oats; \$250 for the best twenty ears of corn, and \$250 for the best bale of hay. The fair will be held from October 10 to 27.

The hay market at San Diego, Cal., is reported weaker than it has been for some time past, and the tendency of prices is downward. Still, the better grades command from \$12 to \$13 a ton. Large holdings in the section tributary to San Diego are pressing for an outlet and commission men are not inclined to buy, for the reason that the yield is expected to be larger than for several years past.

High freight rates are engrossing the attention of members of the National Hay Association, owing to the serious losses suffered by the dealers during the past season by the sudden increase in rates. If the present high tariff is continued the producer will suffer the loss. On the basis of \$12.50 per ton for hay in New York, with \$6 freight, \$1 commission, \$2.50 for baling and delivering to railroad and unloading, the producer would receive \$3 per ton for his product.

From the report of Hon. J. A. Davidson, minister of agriculture for Manitoba, for 1899, it appears that 88 per cent of the wheat crop of that province for 1899 graded No. 1 hard, or 12,456,640 bushels out of 15,322,630 bushels inspected. The total wheat yield from Manitoba is placed at 27,922,230 bushels, averaging 17.13 bushels to the acre. The total oat yield is given at 22,318,378 bushels, an average of 38.80 to the acre. The total yield of barley was 5,379,156 bushels, or 29.40 to the acre. Of flax there were 304,920 bushels, and of rye 64,340 bushels.

New York's decrease in grain exports is attributed by New Yorkers to two main causes—an excess of toll charged by the Buffalo elevators, and a lack of dock facilities in New York. In New York the railroads control all of the available space for docks, so that there is no room for canal boats coming through the Erie canal from Buffalo, and as a result the railroads have secured all the old time business of the canal and have made rates to suit themselves. All this is to be remedied by the Cragin syndicate scheme, which means the building of a great island in New York harbor for the accommodation of the docks and elevators necessary for the grain export business.

The steamer Quito sailed from New York May 13 for Bombay, with 200,000 bushels of corn for the famine district. This is said to be the largest cargo ever carried by any vessel on a similar errand, and comes from people of all parts of the United States. The Kansas India Famine Relief Committee contributed 20,000 bushels, and the Mennonites 8,000 bushels. The voyage will require about 40 days. The Quito was formerly in service in Scotch waters and was sent to this country for orders. Her registered tonnage is 3,357, and capacity 200,000 bushels. She was chartered for this mission of mercy by the United States government, through the Navy Department, and was selected because of her large carrying capacity. The charter price to be paid for the voyage to India is \$40,000.



## IN THE COURTS

James Liberty, formerly a grain buyer at Minto, N. D., was arrested at Pomona, Cal., about April 19, charged with embezzlement from Robbins & Warner of Duluth.

E. H. Day has begun an action against Noah Lee and Silas J. Hipsher of Caledonia, Ohio. He alleges that \$1,684.38 of insurance money on their burned mill and elevator is being applied to payment of debts of which he owes only one-third; and he prays for an accounting to him of the balance found by the court to be due him.

David C. Fisher of Ransom, Ill., charged with embezzlement of \$2,500 from his principals, Carington, Hannah & Co. of Chicago, was declared not guilty by a jury at Ottawa, on April 14. The prosecution was instituted by security company on Fisher's bond. The claim was that Fisher misapplied funds supplied him to pay for grain only.

The liability of brokers for war taxes on marginal transactions was argued in Philadelphia recently in the case of J. B. Flesherman against the collector of internal revenue. Flesherman contended that, as no merchandise was delivered, therefore the only tax due was for the stamp, at the rate of 2 per cent on the par value of the shares. Decision was reserved.

W. D. Judd and J. L. Ewan, operating at Topeka, Kan., as the Capitol Elevator Company, have sued the C. R. I. & P. Ry. Co. for \$322, alleged to have been paid as switching charges. They claim a verbal contract with the railway company's agent, made in 1897, by which the company was to refund switching charges on all cars of wheat and corn delivered to the railway company for shipment. Payments for the period between October, 1897, and January 1, 1899, are now refused.

The trial of McLain Brothers of Chicago on a charge of using the mails to carry on a bucket-shopping business began in the United States District Court on May 2. Several witnesses swore that they had lost sums ranging from \$600 to \$10,000 through speculations with the McLains. The postal authorities swore that the firm's mail averaged 200 letters daily. The defendant's attorney said in his opening statement that his clients refused to show their books in court because they contain the names of ministers as speculators. In respect to Parker, Nicol and Whyland, indicted on the same complaint with the McLains, their names were not used by the witnesses during the earlier part of the examination by the prosecution.

Adolph J. Lichtstern & Co. have brought action against the Chicago Board of Trade for injunction to restrain that body from cutting off its market quotations. The board had ordered all firms doing business with Lichtstern & Co. to cut out wires to them, on the ground that they do a bucket-shop business. The action is to determine whether the Board can legally say that a house dealing in stocks and grain "is a bucket-shop simply because commodities which are dealt in on the Board of Trade are handled by that house." Petitioners claim that the question of quotations has been settled by the Supreme Court of the state of Illinois, the law having been for several years in this state that "the Board of Trade has no power to discriminate as to who shall and who shall not have its quotations."

The discharge of Grain Inspector Switzer from the New Orleans Board of Trade last August has resulted in the filing of a petition by that officer in court proceedings to secure a restoration of his employment, or damages for his discharge. Switzer alleges that his discharge was due wholly to the adverse influence of the railroad companies, which, he says, were displeased with him because of his vigilance in preventing transfers of grain from elevators to ships when the grain was hot and unmerchantable and of a lower grade than that specified in the bill of lading. He specifically charges the railroad companies with having "illegally conspired together to injure your petitioner and to procure

his discharge, in order that they might go on with their illegal acts and commit frauds upon the mercantile community, etc."

## GOVERNMENT PERCENTAGE.

In response to a request from the Chicago Board of Trade authorities for an interpretation of the government percentage on condition, the statistician says: "This office has always consistently declined to consider its condition figures during the growing season as convertible into any definite yield per acre." The statement was made in anticipation of the May crop report, says the Times-Herald. Statistician Snow contributed a recent magazine article tending to show that the yield per acre in this country is steadily rising and that the par of condition now should be about 17 bushels per acre. Some years ago the assistant statistician of the Agricultural Department at Washington contributed an article to the North American Review, in which he declared the par of wheat condition in the Agricultural Department was about 15.7 bushels. The editor of the Daily Trade Bulletin uses 16 bushels as the par of wheat condition. It is a fact not generally recognized that the par of condition one year may be different from the par of condition another, according as the major part of the crop changes from one locality to another.

## DOTS AND DASHES

The Fargo Linseed Oil Mill has been sold to the American Linseed Co.

Terre Haute, Ind., is to have another distillery (fourth), which will consume 10,000 bushels of corn daily.

Harry Wilson, formerly of Wilson & Co., Milwaukee, is now with the Lull-Franke Grain Co., Milwaukee.

The Milwaukee board of fire underwriters on April 26 advanced elevator rates from \$1.75 to \$2.45, or about 33 per cent.

There are eleven candidates for the nomination for railroad and warehouse commissioner of Missouri on the Democratic ticket.

Reports from Kansas show that the farmers of that state during 1899 paid off \$150,000,000 in mortgages. No wonder the farmers are independent.

W. E. Dutton, a grain expert of Nashville, Tenn., says there is a shortage of corn all through the South. Ten southern states, he claims, show a deficiency of 125,850,653 bushels.

Several hundred acres of broom corn will be planted in Knox County, Southwestern Indiana, this season. This is a new departure in Indiana farming, but the soil is said to be adapted to it.

Insurance rates on elevators in Milwaukee have been raised from \$1.75 to \$2.45 on \$1,000. The rate in Chicago is \$4.25 on \$1,000. Underwriters claim that the Milwaukee rate has long been too low.

The National Association of Manufacturers, at its late annual meeting at Boston, adopted resolutions petitioning railways for a reduction of the carload minimum from 30,000 to 24,000 pounds.

South of Ava, in Southwestern Illinois, there is a corn-growing section, practically in one great field, which is said to be the banner cornfield of the world. It is expected to give this year 600,000 bushels of corn, an average of 100 bushels to the acre.

At the annual meeting of the Montreal Grain Elevating Company, held April 23, Andrew Allen was re-elected president of the company. The annual report showed that the exports of grain from Montreal had fallen off 8,500,000 bushels from the preceding year.

Since the season of navigation on the lakes opened, about 1,750,000 bushels of grain have been shipped from Manitowoc, Wis., as follows: Wheat, 645,000 bushels; corn, 345,000 bushels; oats, 639,300 bushels, and barley 102,000 bushels. This is in addition to the grain that has been sent across the lake weekly during the winter months. Manitowoc is now be-

ginning to take on airs as a lake grain shipping port of importance.

About 3,000 acres in Santa Barbara County, Cal., are devoted to growing mustard seed for market. The varieties are English yellow and Trieste red. Last year about 300,000 pounds were harvested, a short crop, for which the farmers received 2 to 4 cents a pound.

The hamster, a small rat-like creature, is the latest candidate for honors as a grain destroyer. This pest has made its appearance again in Belgium. Its ravages among the wheat and barley fields of Belgium have become so great that the farmers and the government have united in measures of extermination.

A movement is on foot at Superior to remove the inspection yards of the Northern Pacific road from Duluth to South Superior. A part of the N. P. cars are now inspected at the latter point. The "Omaha" and Great Northern roads now inspect in South Superior, and the removal of the N. P. inspection to the Superior would make that city the real grain market at the head of the lakes.

South Dakota corn is now being shipped north to the northern part of the state and to North Dakota, for the first time in years. It is being sent into territory where no corn is raised. Where cattle feeding has become unprofitable the problem of the disposal of surplus corn has assumed serious proportions, but the demand from the North seems to have opened up at least a partial market. The local price realized on these shipments is about 20 cents a bushel.

The soy bean seems to be climbing to the top wave of popularity. It is a Japanese plant which has rare properties as a soil renovator by adding nitrogen to the land. Aside from its value as forage and as a nitrogenous crop the beans are valuable for feeding stock, as they contain a large amount of protein. At the Kansas experiment station it was shown that they were the best food for fattening hogs, as a smaller quantity of soy beans is required to make a pound of pork than is required of any other food. The prediction is made that in five years nearly every farmer and stock-raiser will be growing soy beans.

## EXPORTS OF GRAIN.

Following are the exports of grain reported by the Bureau of Statistics for April, 1900, and for the ten months ended April 30, 1900, compared with same periods, 1899:

	April, 1899.	April, 1900.
Barley, bu. ....	97,363	1,343,782
Corn, bu. ....	13,000,063	15,506,140
Oats, bu. ....	1,353,890	1,641,800
Rye, bu. ....	180,327	57,799
Wheat, bu. ....	4,620,328	7,406,649
Total breadstuffs, val.	\$15,108,464	\$18,566,718

	Ten months ending April, 1899.	April, 1900.
Barley, bu. ....	1,905,389	21,562,260
Corn, bu. ....	140,600,533	175,005,171
Oats, bu. ....	21,439,105	34,226,140
Rye, bu. ....	8,890,543	1,700,671
Wheat, bu. ....	121,767,127	83,652,305

Total breadstuffs, value .....	\$224,236,546	\$208,719,525
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## WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at nine primary markets during the forty-five weeks ending May 7, for the last three years, according to the Cincinnati Price Current, were as follows:

	1899-1900.	1898-99.	1897-98.
St. Louis.....	8,867,000	13,200,000	11,472,000
Toledo.....	10,939,000	11,847,000	10,867,000
Detroit.....	2,698,000	4,570,000	4,380,000
Kansas City.....	16,629,000	27,031,000	27,950,000
Cincinnati.....		791,000	729,000
Winter.....	38,122,000	57,331,000	55,415,000
Chicago.....	24,664,000	8,825,000	33,845,000
Milwaukee.....	9,837,000	11,847,000	8,915,000
Minneapolis.....	77,345,000	77,048,000	70,535,000
Duluth.....	52,568,000	66,177,000	40,474,000
Spring.....	164,414,000	186,895,000	153,769,000
Total bus. 45 weeks.....	202,542,000	244,231,000	209,181,000



## RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago for the month ending May 12 has been as follows:

April.	NO. 2* R.W. WHT.		NO. 1 NO.* S.P. WHT.		NO. 2* CORN.		NO. 2 OATS.		NO. 2 RYE.		NO. 1 N. W. FLAXSEED.	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
12	69	70	65	67	39 1/2	39 3/4	25	25 1/2			173	173
13												
14	69 1/2	69 1/2	65	66 1/2	39	39	24 1/2	25	6	56	113	173
15												
16	69 1/2	69 1/2	65	66 1/2	39 1/2	39 1/2	24 1/2	24 1/2	56	56	173	173
17	69	70	65	66 1/2	39 1/2	39 1/2	24 1/2	24 1/2	56	56	173	173
18	69	70	65	66 1/2	39 1/2	39 1/2	24 1/2	24 1/2	56	56	173	173
19	68 1/2	69 1/2	64 1/2	65 1/2	38 1/2	38 1/2	24	24	56	56	173	173
20	68 1/2	69 1/2	64 1/2	65 1/2	38 1/2	38 1/2	24	24	56	56	173	173
21	68 1/2	69 1/2	64 1/2	65 1/2	38 1/2	38 1/2	24	24	56	56	173	173
22												
23	61	69 1/2	61	67	37 1/2	38 1/2	24	24 1/2			173	173
24	69	69 1/2	64 1/2	65 1/2	38 1/2	38 1/2	24 1/2	24 1/2	54 1/2	56		
25	63	64	65 1/2	66 1/2	39 1/2	39 1/2	24 1/2	24 1/2			173	173
26	69 1/2	70	65 1/2	66 1/2	39 1/2	39 1/2	24 1/2	24 1/2	54 1/2	54 1/2	173	173
27	70	70	65 1/2	66 1/2	39 1/2	39 1/2	24 1/2	24 1/2	53 1/2	53 1/2	173	173
28	70	70	65 1/2	66 1/2	39 1/2	39 1/2	24 1/2	24 1/2			173	173
29												
30	70	70 1/2	65 1/2	66 1/2	39 1/2	39 1/2	24 1/2	24 1/2				

† Holiday \* Nominal price.

During the week ending April 20, Prime Contract Timothy Seed sold at \$2.40@2.45 per cental; Prime Contract Clover Seed at \$7.75@8.00; Hungarian at \$0.60@0.77 1/2; German Millet at \$0.90@1.50; buckwheat at \$0.90@1.10 per 100 pounds.

During the week ending April 27, Prime Contract Timothy Seed sold at \$2.40@2.45 per cental; Prime Contract Clover Seed at \$7.00; Hungarian at \$0.65@0.77 1/2; German Millet at \$1.00@1.60; buckwheat at \$0.90@1.10 per 100 pounds.

During the week ending May 4, Prime Contract Timothy Seed sold at \$2.40@2.50 per cental; Prime Contract Clover Seed at \$7.00; Hungarian at \$0.65@0.75; German Millet at \$1.00@1.50; buckwheat at \$0.90@1.10 per 100 pounds.

During the week ending May 11, Prime Contract Timothy Seed sold at \$2.50@2.55 per cental; Prime Contract Clover Seed at \$7.00; Hungarian at \$0.62 1/2@0.75; German Millet at \$0.90@1.50; buckwheat at \$0.90@1.10 per 100 pounds.

## FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the 21 months ending with April as reported by S. H. Stevens, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	'99-1900.	1898-99.	'99-1900.	1898-99.
August	624,875	666,420	670,392	678,790
September	1,231,875	1,212,760	775,135	729,805
October	1,163,814	1,140,280	348,149	572,650
November	1,068,698	769,210	555,308	809,824
December	612,875	423,960	494,359	281,720
January	174,000	319,300	231,433	231,619
February	389,750	180,960	110,626	107,220
March	188,750	317,740	221,215	380,768
April	198,750	271,440	10,953	185,020
May		272,020		139,633
June		121,220		57,205
July		175,625		194,129
Total bushels	5,873,887	5,880,915	3,499,589	4,463,384

## EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending May 12, as compared with same weeks last year, have been as follows:

Articles.	For week ending May 12.		For week ending May 5.	
	1900.	1899.	1900.	1899.
Wheat, bushels	1,850,000	1,189,000	2,030,000	1,593,000
Corn, bushels	4,411,000	3,075,000	4,274,000	3,082,000
Oats, bushels	665,000	834,000	711,000	786,000
Rye, bushels	93,000	72,000	11,000	131,000
Barley, bushels	263,000		140,000	
Flour, barrels	404,800	325,800	414,109	368,000

England could eat flour made from her own wheat, in a normal year, for only four months. For the balance of the year she must import grain or go without.

The Indiana Corn Growers' Association has decided to have a three days' meeting, with exhibit of corn, at the Indiana State Fair, and also to hold a meeting during next winter at Indianapolis.

## RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of April, 1900:

**BALTIMORE**—Reported by Wm. F. Wheatley, secretary of the Chamber of Commerce:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels	653,321	414,485	376,495	418,551
Corn, bushels	4,405,326	3,602,110	3,644,905	4,384,599
Oats, bushels	532,114	338,417	133,463	125,453
Barley, bushels	5,073	611		
Rye, bushels	31,042	137,422		94,244
Timothy seed, bushels	1,387	2,446		1,355
Clover seed, bushels	1,285	2,448		
Hay, tons	6,91	5,776	2,771	1,090
Flour, bbls.	311,201	367,432	270,529	301,541

**BOSTON**—Reported by Elwyn G. Preston, secretary of the Chamber of Commerce:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels	1,072,470	800,334	621,288	637,229
Corn, bushels	1,076,529	1,403,729	859,468	1,739,386
Oats, bushels	821,844	700,825	142,900	40,489
Barley, bushels	168,439	651	819,944	
Rye, bushels	58	651		
Hay, tons	12,921	11,210	10,217	72,219
Flour, barrels	216,011	135,787	101,385	124,967

**BUFFALO**—Reported by Chas. H. Keep, secretary of the Merchants' Exchange:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels	992,900			
Corn, bushels	4,054,910			
Oats, bushels	1,200,000			
Barley, bushels	130,000			
Rye, bushels	23,000			
Hay, tons				
Flour, barrels				

**CHICAGO**—Reported by George F. Stone, secretary of the Board of Trade:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels	1,350,015	1,365,990	2,828,670	838,983
Corn, bushels	7,054,360	4,936,068	12,094,183	6,941,592
Oats, bushels	6,615,537	5,513,012	7,813,614	5,937,545
Barley, bushels	94,666	6,017,979	556,106	247,191
Rye, bushels	104,550	232,695	94,324	284,090
Timothy Seed, lb.	3,033,805	4,322,008	5,682,942	4,874,588
Clover Seed, lb.	257,774	659,829	797,572	794,868
Other Grass Seed, lb.	958,215	926,174	1,732,643	856,077
Flaxseed, bushels	195,050	357,540	183,220	83,780
Broom Corn, lb.	205,825	146,675	253,216	665,711
Hay, tons	14,713	14,630	3,682	327
Flour, barrels	728,793	396,655	959,820	435,573

**CLEVELAND**—Reported by F. A. Scott, secretary of the Chamber of Commerce:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels	156,572	208,339	166,015	1,2567
Corn, bushels	846,545	352,905	1,313,367	227,351
Oats, bushels	831,693	517,767	411,182	180,364
Barley, bushels		6,930	3,700	7,440
Rye and other cereals, bu.				
Flaxseed, bushels			110,000	
Hay, tons	18,916	12,626	3,686	2,119
Flour, barrels	55,540	34,420	17,490	2,060

**CINCINNATI**—Reported by C. B. Murray, superintendent of the Chamber of Commerce:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels	46,150	59,401	44,224	60,351
Corn, bushels	584,145	329,944	274,758	52,054
Oats, bushels	342,126	251,380	97,825	118,492
Barley, bushels	39,681	37,383	2,334	1,624
Rye, bushels	10,683	41,315	26,362	11,744
Timothy Seed, bags	3,045	3,687	3,686	14,6
Clover Seed, bags	2,739	1,256	4,756	2,445
Other Grass Seeds, bags	8,715	2,590	8,345	3,908
Hay, tons	6,725	9,139	4,716	6,027
Flour, barrels	231,062	148,301	197,363	113,770

**DETROIT**—Reported by F. W. Waring, secretary of the Board of Trade:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels	125,551	242,137	57,869	81,094
Corn, bushels	381,047	29,631	229,434	349,175
Oats, bushels	111,064	102,366	33,732	
Barley, bushels	72,221	23,067	7,584	2,347
Rye, bushels	4,968	12,124	2,231	8,780
Hay, tons				
Flour, barrels	19,000	11,400	17,600	8,800

**DULUTH**—Reported by S. A. Kemp, secretary of the Board of Trade:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels	2,034,799	795,610	2,655,519	11,841
Corn, bushels	273,181	43,092	1,402	6,539
Oats, bushels	43,808	4,832	18,669	2,670
Barley, bushels	70,853	7,856	41	825
Rye, bushels	17,982	11,988	88,510	
Flaxseed, bushels	15,245	152,625	5,167	157,007
Flour, barrels	393,425	172,110	99,790	100,225
Flour production, bbls.		130,080		

**GALVESTON**—Reported by Dr. S. O. Young, secretary of the Cotton Exchange and Board of Trade:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels			1,167,700	450,881
Corn, bushels			254,572	212,838

**MILWAUKEE**—Reported by Wm. J. Langson, secretary of the Chamber of Commerce:

Articles.	Receipts.		Shipments.	
	1900.	1899.	1900.	1899.
Wheat, bushels	777,000	632,100	384,200	127,915
Corn, bushels	271,150	617,650	1,040,340	1,343,558
Oats, bushels	697,200	724,800	2,216,300	173,710
Barley, bushels	696,750	306,000	78,600	215,500
Rye, bushels	79,100	107,100	208,378	245,675
Timothy Seed, lb.	479,050	147,010	36,920	181,330
Clover Seed, lb.	116,997	159,070		60,399
Flaxseed, bushels	15,080	7,540		4,640
Hay, tons	1,572	1,231		37
Flour, barrels	290,295	146,470	273,473	220,193

**PEORIA**—Reported by R. C. Grier, secretary of the Board of Trade:

Wheat, bushels	32,650	38,964	45,000	4,530
Corn, bushels	1,833,710	1,131,050	362,900	3,982,000
Oats, bushels	646,000	574,151	905,300	175,750
Barley, bushels	123,104	81,150	63,000	39,000
Rye, bushels	6,000	123,000	6,000	1,200
Mill Feed, tons	795	435	5,957	4,515
Seeds, lb.	274,200	90,000	210,000	
Broom Corn, lb.	15,000	30,000		
Hay, tons	3,201	1,490	120	166
Flour, barrels	110,650	25,750	99,750	24,350



# ELEVATOR & GRAIN NEWS

## ILLINOIS.

An elevator is soon to be built at Serena, Ill.  
Lied & Son will build an elevator at Red Oak, Ill.  
A new elevator is nearing completion at Triumpha, Ill.

D. A. Syme has sold his grain business at Sycamore, Ill.

Work has been commenced on a new elevator at Lodemia, Ill.

The Neola Elevator Co. has leased an elevator at Mt. Morris, Ill.

Geo. Massey has sold out his grain business at Little Indian, Ill.

J. W. Robertson will build an addition to his elevator at Ogden, Ill.

W. D. Knapp has an elevator in course of construction at Amboy, Ill.

C. H. Comstock of Ashkum, Ill., is building another elevator at that place.

The Pfeffer Milling Co., Lebanon, Ill., is completing an 80,000-bushel elevator.

Thomas Hanley of Merna, Ill., has put in a new steam boiler at his elevator.

Joe Potter has purchased J. W. Cole's grain and lumber business at Toulon, Ill.

F. L. Churchill has made extensive improvements on his elevator at Fairbury, Ill.

C. C. Davis, a grain merchant at Laura, Ill., has taken up his residence in Galesburg.

Munday-Settlemyre Co. have completed an addition to their elevator at Litchfield, Ill.

U. M. Holmes has succeeded the firm of Holmes, Claggett & Co. at Cooksville, McLean Co., Ill.

O. A. Means & Co. of Anchor, Ill., have purchased a site and will build an elevator at Colfax, Ill.

R. J. Riley is now in charge of the Francis Elevator at Forrest, Ill., which he recently purchased.

The Waterloo Milling Co. of Waterloo, Ill., has completed a 20,000-bushel elevator at Lemen Station.

The Neola Elevator Co. of Chicago have completed an addition to their elevator at Millington, Ill.

The Farmers' Elevator at Varna, Ill., is to be sold. Thos. Wheeler of Leeds is said to have an option on it.

F. G. Jones has sold his elevator at Wenona, Ill., to a Mr. Tallen of Benson, who will locate there and operate it.

W. H. Whiteside has purchased the interest of his partner in the grain firm of Whiteside & Donahoo at Joslin, Ill.

Benson Bros., who recently sold their elevator at Mahomet, have decided to build an elevator at Colfax, Ill.

J. E. Tjardes now has in course of construction his large new elevator at Switch D, six miles east of Saybrook, Ill.

J. E. Miller is about to commence the erection of an elevator at Hartsburg, Ill., to replace the one recently burned.

A. Keeler of Pearl City, Ill., will improve his elevator plant by the addition of a dump, gasoline engine and feed mill outfit.

The Munday-Settlemyre Co. of Litchfield, Ill., have purchased from the Barnard & Leas Mfg. Co. a No. 2 Cornwall Corn Cleaner.

H. C. Curtis and Dr. Underwood of Ava, Ill., have purchased property at Carbondale and will build an elevator and flour mill there.

Roberts & Moschel, of Morton, expect to build an elevator at Groveland, Ill., the one they have heretofore leased having been sold.

Odell, Ill., is said to be one of the best grain points along the C. & A. Railroad, as last year 1,500,000 bushels of corn and oats were shipped from there.

Albert H. Farnum, well known in the grain trade and formerly of the firm of Baldwin & Farnum, is to go with J. F. Harris, Board of Trade building, Chicago.

The Barnard & Leas Mfg. Co. report the sale of one No. 1 Victor Corn Sheller and one No. 1 Little Victor Corn Sheller and Cleaner through Fairbanks, Morse & Co., Chicago. Also one No. 000 Little

Victor Corn Cleaner through the Webster Mfg. Co., Chicago.

The 1,500,000-bushel elevator of McReynolds & Co. at South Chicago, Ill., was completed a couple of weeks ago and is rapidly being filled with grain.

M. Weidner, who has sold his grain elevator at Claytonville, Ill., has bought and will operate the grain elevator of Puett & Williams at Cissna Park.

Chas. W. Ballard, manager of the Farmers' Grain & Seed Co. at Girard, informs us that he will go into the grain and feed business at Peru, Ill., on June 1.

The Calumet Grain & Elevator Co. of Chicago, has increased its capital stock from \$100,000 to \$200,000. A 500,000-bushel addition is being built to the South Chicago elevator.

E. J. Helmerdinger has sold his interest in the feed and lumber business at Cary, Ill., to his brother George, and has taken a position in the grain and feed office of Elmer Bagley at Woodstock.

The Rock Island Railroad is building a new slip on the Calumet River at South Chicago, which will have 20 feet of water. This is taken by some to indicate that an elevator will be built there this year.

M. Weidner of Claytonville, Ill., has sold his elevator to S. M. Rose and Fred Ranz. Mr. Ranz has been manager of the elevator at Wellington and will have the same position in the Claytonville house.

The West Side Elevator at Cissna Park, Ill., has been sold by Puett & William to Songer & Co., who have employed Joseph Burt to look after the elevator. The new firm is composed of G. W. Songer, C. E. Lindley and J. R. Dillon. They contemplate making improvements and increasing the capacity.

## EASTERN.

R. T. Dodge has opened a grain store at Henniker, N. H.

Geo. B. Robinson has opened a grain store at North Blandford, Mass.

P. D. Beach has engaged in the grain and feed business at Branford, Conn.

Geo. H. Wilbur of East Thompson, Conn., has sold his grain business to E. A. Robbins.

Mulford Mains has opened a grain and feed store on Speedwell Avenue, Morristown, N. J.

Henry W. Allen has bought out W. C. Sinclair's grain and feed business at Ossipee Station, N. H.

J. A. Umble & Bro. are the successors of Umble & Newhouser in the grain business at Bird-in-Hand, Pa.

A 4-story building, 40x180 feet, is to be erected at Avon, N. Y., to be used as a seed and bean warehouse.

Marshall & Jennings, grain merchants of Boston, Mass., have dissolved partnership, Henry Jennings continuing.

James Nevin, a grain, feed and hay merchant of New York, has opened a branch store at Sea Bright, N. J.

Arthur A. Prentiss & Co. are the successors of Sykes, Hodge & Arnold in the grain business at Athol, Mass.

The Central-Hudson Railroad Elevator at Albany, N. Y., is to be torn down to give increased room for the freight yards.

Isaac L. Dodge, grain agent, Springfield, Mass., has filed a bankruptcy petition with liabilities of \$1,753.19 and assets of \$1,050.

Austin, Bolton & Bronner, the feed merchants at Cooperstown, N. Y., will put in a feed grinding mill to be operated by a gasoline engine.

The American Linseed Co. has let the contract for an 800,000-bushel steel tank storage and elevator plant, to be erected on Staten Island, N. Y.

The Sodus Bay Elevator Co. has secured title to two and one-half acres of land under water at Sodus Point, N. Y., to be used for dock purposes.

Nathan W. Tupper, a grain, hay and flour merchant at Newton, Mass., has filed a petition in bankruptcy, with liabilities of \$15,578.10 and assets of \$1,610.

The Pennsylvania Railroad Co. has torn down its old grain warehouse on Thirtieth Street, Philadelphia, and will use the ground for additional freight yard room.

The old Corn Exchange Elevator property on the East Side at Oswego, N. Y., has been sold to a New York City concern, who will probably use it for other purposes.

An attempt was made one night last month to blow open the safe in Chas. Hieber & Co.'s grain and feed establishment at Marshall and Callowhill streets, Philadelphia. The burglars were frightened

away before they had completed their work of wrecking the safe, and so got nothing.

The Lehigh Valley Railroad Co. has commenced work at Black Tom, N. J., on an elevator which will be one of the largest on the Atlantic seaboard.

The firm of Klinedinst, Smyser & Lauer, grain, feed, flour and coal dealers at Graybill's Station, Pa., has been dissolved, the latter two partners selling their interests to M. G. Klinedinst, the senior partner.

The newspapers of New London, Conn., have again heard from "unquestioned authority" that the Grand Trunk Railway are to build grain elevators—not one, but a whole dozen—on their harbor property in that city and make it the export point for all their grain.

The property of the Eastern Elevator Co., Buffalo, N. Y., has just been sold for \$285,350, under mortgage foreclosure, to F. K. Quine of Brooklyn, who bid it in for the American Linseed Co. The sale commenced Saturday forenoon with a bid from F. D. Locke, representing the old stockholders, for \$221,000. Bidding between the above two gentlemen was continued until Monday afternoon, when the sale was made as above, terms cash.

A conference was held a few days ago between Pennsylvania Railroad officials and the grain committee of the Philadelphia Commercial Exchange, of which James B. Canby is chairman, with a view to establishing new arrangements for local grain storage and deliveries in substitution for the facilities previously afforded by the West Philadelphia Grain Depot, which has been torn down by the company. No definite conclusion was reached, but plans were discussed which are likely to result in arrangements that will be satisfactory to the grain trade.

The Pennsylvania Railroad Co., by the absorption of the Long Island Railroad, has acquired valuable riparian rights which it proposes to make use of at once. Instead of transferring freight from train to ship at Jersey City and Hoboken, the company is to have its own piers and water front near the Erie Basin. Additions and alterations are to be made in and about the Jersey City terminal station, so that the immense lighters to be built especially for this service may be accommodated. The improvements contemplated include an immense grain elevator.

## CENTRAL.

The McMillan Elevator at Ohio City, Ohio, has been completed.

Long & Long have built an addition to their elevator at Convoys, Ohio.

A 15,000-bushel elevator is being built near the 3-I depot at Hamlet, Ind.

Hastings Bros. recently purchased a grain and coal business at Cedarville, O.

The Grennell Seed Co. has commenced work on its new building at Saginaw, Mich.

John Von Stein has sold his elevator at Jenera, Ohio, to a Mr. Risser of Vaughnsville.

The Shields-Wilbur Co. now have in operation their new elevator at Marysville, Ohio.

David Kester has purchased a building at Savona, Ohio, which he will convert into an elevator.

Bauman & Co. are the successors of Riddle & Bauman in the grain business at Chase, Ind.

S. S. and James Smith, grain dealers at Mt. Sterling, Ohio, made an assignment on May 1.

F. & W. R. Hamlin have purchased the grain business of C. T. Parris & Co. at Durand, Mich.

D. S. Scoffern, who recently built an elevator at New Carlisle, Ind., will now build an office near it.

The grain firm of Cutsinger & Thompson, Edinburg, Ind., has been succeeded by Cutsinger & Webb.

Harry Keck contemplates building an elevator at Bryan, Ohio, with a capacity of 50,000 to 75,000 bushels.

The Noblesville Milling Co. is building an elevator at Noblesville, Ind. Its capacity will be 35,000 bushels.

McLaughlin, Ward & Co. have succeeded M. & J. McLaughlin & Co. in the grain and bean business at Jackson, Mich.

Frank Windlate has sold his elevator at Paulding, Ohio, to Ireton Bros. of Van Wert, who took possession May 1.

The safe in the office of the Grayton Elevator Co., Grayton, Ohio, was wrecked by burglars recently and only \$14 secured.

Geo. D. Eustis purchased at assignee's sale last month the Canal Elevator and Warehouse at Cincinnati for \$43,100. He is said to have made the



purchase for parties whose names have not yet been made public.

Asa Smith is building an elevator at Antwerp, Ohio. Another elevator known as the People's is also being erected there.

It is stated that the Northwestern Elevator Co. will put up an elevator at Stockton, Ind., to replace the one destroyed by fire last fall.

Shimp & Miller have opened a wholesale and retail grain, hay, wood and coal business in the old Three-I freight house at South Bend, Ind.

The firm of Minnick & Landes are completing an elevator at Trotwood, Ohio. This is the firm which was mentioned last month as Minnick & Zandes.

Wm. L. Watt of Toledo, formerly in the grain and feed business, has filed a petition for discharge in bankruptcy, scheduling liabilities of over \$12,000.

R. B. Gordin, the elevator man of Solon, Ohio, sold over 1,500 bushels of seed oats this spring, indicating an unusually large oats acreage in that vicinity this year.

The Samuel Born Grain Co., Lafayette, Ind., have purchased what is known as the old Knight Elevator, near that town. It is said to have a capacity of 175,000 bushels.

The Lafayette Elevator & Mill Co. of Lafayette, Ind., has been incorporated with a capital stock of \$5,000, by De Witt C. McNutt, John F. McHugh and W. H. Moore.

J. D. Myers has purchased the Miller Elevator and Warehouse at Worthington, Ind., and will continue the business of buying and shipping wool, grain and grass seed.

Byron B. Brothers of Goshen, Ind., says he will not rebuild the New Paris elevator which burned recently, this summer, on account of the poor outlook for wheat in Elkhart County.

The People's Elevator Co., Antwerp, Ohio, have purchased of the Barnard & Leas Mfg. Co. a No. 4 Victor Corn Sheller and a No. 4 Cornwall Corn Cleaner, pulleys, belts, heads, boots, etc.

Walter A. Bunting of Greenville entered into partnership on May 1 with W. J. Thomas, the grain and coal dealer of Schoolcraft, Mich. The new firm is known as W. J. Thomas & Co.

C. E. Burns of Howell, Mich., has sold his grain and bean elevator at that place, which he advertised in the "American Elevator and Grain Trade" last month, to the Michigan Milling Co. of Ann Arbor.

The Reynolds Grain Co. has been incorporated with a capital stock of \$20,000 to lease and operate the Botsford Elevator at Port Huron. It has been operated for some time by the Nye & Jenks Co. of Chicago.

#### SOUTHERN.

An elevator is to be built at Krum, Texas.

Moore & Lentz will build an elevator at Lenoir, N. C.

F. S. Windle is building a grain elevator at Britton, Texas.

The elevator at Tulsa, Ind. Ter., which collapsed recently, is being rebuilt.

Stevenson Bros. have a 10,000-bushel elevator at Peckham, O. T., about completed.

The wholesale grain firm of Bell, Mallon & Co., Nashville, Tenn., has been dissolved.

J. T. Stark & Co. are erecting a corn shelling and electric light plant at Plano, Texas.

Moore & Reynolds have sold their grain business at Pulaski, Tenn., to A. W. Moore & Son.

The Guthrie Grain Co. have built a new office in connection with their elevator at Newkirk, Okla.

C. J. Smith and J. T. Thomasson will engage in the grain business at Paducah, Ky., commencing about July 1.

A company has been organized to build a good-sized elevator at Sherman, Texas, in time to handle the new crop.

The Meridian Mill & Elevator Co. of Meridian, Bosque Co., Texas, has incorporated with a capital stock of \$15,000.

It is reported that two grain elevators are being built at Nowata, Ind. Ter. One of them is for the Caney Grain Co. of Caney, Kan.

T. L. Davis, late of Moulton-Davis Company, and T. B. Andrews, late president Memphis Grain Elevator & Manufacturing Company, and secretary and treasurer of the Eagle Mill Company, have formed a partnership under the firm name of Davis & Andrews. Their offices are located in Room 18 Cotton Exchange building, Memphis, Tenn. They succeed the Moulton-Davis Company as wholesale deal-

ers in grain, hay, flour, bran, cottonseed meal and mill feeds.

W. G. Nunn of Ladonia, Texas, will build a large cottonseed-oil mill in Cleburne.

R. J. Smith & Co., who recently erected two large buildings at Somerset, Ky., have engaged in the wholesale grain, feed and grocery business.

It is reported that Dallas, Texas, parties are organizing a company to build a large grain elevator there at once to be ready for the new crop.

S. B. Cocke is reported to have let the contract for building a large elevator at Hillsboro, Texas. The M., K. & T. R. R. will build a sidetrack to the building.

Henry Mestayer, Gus. Weil and Luke Trainor have erected a two-story building at New Iberia, La., and installed a corn shelling and feed and meal grinding outfit.

The Southern Pacific Ry. has let a contract for dredging a channel and slips in connection with new wharves at Galveston, Texas. The erection of a 2,500,000 bushel elevator there is still being talked of.

A correspondent at Temple, Texas, writing to the Galveston News, says that four years ago there was not enough wheat raised in that section to supply the population with bread for ten days in the year. Last year a surplus of 175 carloads was shipped from there and this year it is expected the amount will be doubled. A 50,000-bushel elevator is to be completed in time to handle the new crop.

It is reported that cottonseed oil mills are to be erected in the South as follows: By J. D. Odom, J. M. Sherrod and others, near Rocky Mount, N. C. Durant Cotton Oil Co., Bonham, Texas. Farmers' Oil Mill Co., Anderson, S. C. Planters' Cotton Oil Co., Atlanta, Ga. The Rosedale Oil Mills, Rosedale, Miss. Wharton Gin & Milling Co., Wharton, Texas. Joel Bailey, Greenwood, S. C. York Oil & Fertilizer Co., Yorkville, S. C. Atlantic Cotton Oil Co. of Sumter, S. C., will build at Charleston. Mutual Refining Co., Charleston, S. C. People's Cotton Oil Co., Selma, Ala. Jesse Thompson, Swainsboro, Ga. Planters' Cotton Oil Co., Augusta, Ga. Giddings Cotton Oil Co., Giddings, Texas. Comas Mfg. Co., Baxley, Ga. Allen Bros. & Hill, Louisburg, N. C. Detroit Oil & Cotton Co., Detroit, Texas. Portland Cotton Oil Mill Co., Portland, Ark. Cullman Cotton Co., Cullman, Ala. Summit Oil Mill Co., Summit, Miss. Kosciusko Oil Mill & Fertilizer Co., Kosciusko, Miss.

#### MISSOURI, KANSAS AND NEBRASKA.

J. Luckert has sold his elevator at Sabetha, Kan.

The new elevator at Berwick, Kan., was completed last month.

The new elevator at Monroe, Neb., was opened for business on May 2.

W. R. Baldwin is completing an 8,000-bushel elevator at St. Charles, Mo.

It is reported that the Peavey Grain Co. will build an elevator at Wheaton, Kan.

Forbes Bros. are now doing business in their new elevator at North Topeka, Kan.

J. H. Wolridge of Boonville, Mo., contemplates erecting an elevator at Parsons, Kan.

The Farmers' Elevator Company, Marietta, Kan., has incorporated with a capital stock of \$12,000.

N. F. Peterson has again become a partner in the grain business with Nelson Bros. at Osceola, Neb.

The Farmers' Grain & Stock Co., Hooper, Neb., are making repairs and improvements to their elevator.

Among other improvements the Updike Grain Co. are placing Birchard Crane Spouts in their house at Bee, Neb.

Sam Dinsmore has purchased the interest of A. C. Plumb in the grain firm of Cooper & Plumb at Lyons, Kan.

The McCann Elevator at Bruning, Neb., of which Wm. H. Grone is manager, has been sold to a Mr. Miles of Hastings.

Diels Bros. of Scribner, Neb., are about to erect a new elevator and will install modern machinery, including a Hall Grain Distributor.

The Central Granaries Co. have placed Birchard Crane Spouts in the following houses in Nebraska: Diller, Hampton, Malcolm and Ohiowa.

The Strong Grain Co., Coffeyville, Kan., received and loaded, free of charge, all grain in that vicinity contributed to the India famine sufferers.

Henry Leisy, a cattle feeder, is preparing to put up on his ranch near Wisner, Neb., a complete plant for feeding a thousand cattle, consisting of feed grinder, fodder shredder, hay cutter, grain elevator, etc. He will put in a 30 h. p. engine and 40 h. p. boiler, and will have everything so economically ar-

ranged that two men can attend to the whole business, including steaming and cooking feed.

Thompson & James have their new 13,000-bushel elevator at Mayetta, Kan., completed. It is now in operation in charge of Henry G. Cobledick.

Bodewig Brothers, Humphrey, Neb., have installed a gasoline engine for operating their elevator and feed mill, and find it much more economical than steam.

The Duff Grain Co. have just completed extensive repairs on their elevator at Dunbar, Neb., making it a first-class plant and increasing its handling capacity.

L. F. Demeres has sold his elevator at Emerson, Neb., to the Holmquist Grain & Lumber Co. of Oakland, who will take possession June 1. Mr. Demeres intends going to Chas. Mix County, S. D., and establishing a line of elevators.

#### THE DAKOTAS.

B. L. Ewing has closed his warehouse at Turton, S. D., for the season.

The Duluth Elevator Co. has purchased James Liberty's elevator at Minto, N. D.

G. W. Brownell has put up a grain warehouse and feed mill at New Rockford, N. D.

The St. Anthony & Dakota Elevator Co. are completing an elevator at Bartlett, N. D.

Application for an elevator site at Church Ferry, N. D., has been made to the Great Northern Railway.

The Perry & Jones Elevator at Plana, S. D., closed last month, and H. A. Hughes, the buyer, is taking a vacation.

The Bagley Elevator Co. are going to put up a new and thoroughly modern elevator at Faulkton, S. D. J. C. Garrick is their local agent.

The Northwestern Grain & Produce Co. of Sioux Falls, S. D., has been incorporated with a capital stock of \$5,000, by M. M. Hanson, M. Mortensen and T. C. Hansen of Viborg.

The Peavey Elevator Co. will at once build a 40,000-bushel elevator at Edinburg, N. D., to take the place of the one destroyed by fire. The Imperial Elevator Co. will also replace their house at the same point with one of 35,000 bushels' capacity.

Geo. Snyder of Erwin, S. D., has purchased a half interest in H. B. Atwood's elevator at that place. It is stated that Mr. Atwood will conduct the business of Atwood & Snyder during the coming season, while the latter will continue to buy grain for the S. Y. Hyde Co.

#### IOWA.

E. M. Parsons has sold out his grain business at Carroll, Iowa.

An elevator is to be built at Mallard, Iowa, by Dawson & Hahn.

Savage & Co. are building a 5,000-bushel elevator at Gravity, Iowa.

P. M. Ingold of Spencer is building an elevator at Langdon, Iowa.

K. A. Harper has purchased the McElhenny Elevator at Lisbon, Iowa.

H. Keeney & Son have sold out their grain business at Renwick, Iowa.

The Bedford Grain Co., Bedford, Iowa, have their new elevator about completed.

The C., M. & St. P. Ry. has just erected an elevator at Storm Lake, Iowa.

J. W. Johnson has made some improvements in his elevator at Newhall, Iowa.

Chas. Ballman has leased the Sears & Babcock elevator at Battle Creek, Iowa.

I. E. Jackson of Union, Iowa, will make some improvements on his elevator at Atkins.

Henry Wetzel of Lisbon, Iowa, has moved to Minburn, where he recently purchased an elevator.

L. L. Lawrence has sold his elevators at Estherville and Gruver, Iowa, to Henry Rippe of Fairmount, Minn.

Goerdts Bros., Dyersville, Iowa, are making some improvements in their elevator plant, adding a grain dump, etc.

The Nye & Schneider Co. of Fremont, Neb., have purchased a Hall Grain Distributor for their new elevator at Ute, Iowa.

Work is progressing nicely on the large new elevator at Davenport, Iowa, and it will be fully completed when the new crop begins to move.

A newspaper correspondent at Stockton, Iowa, says that the burning of the elevator there has had a bad effect on business, and that the business



interests of the town demand the building of a new elevator.

J. L. Gwynn & Co. of Imogene, Iowa, recently purchased 15,000 bushels of corn from one man.

The Fanton Elevator at Belle Plaine, Iowa, is being rebuilt. Its capacity will be about 8,000 bushels.

Samuel Miller, J. S. Coope and A. P. Miller of Independence, Iowa, have entered into partnership to carry on the grain and live stock business.

The Northern Grain Co. are putting in 280 feet of tile to drain off the water which interferes with the operation of their elevator at Lake Mills, Iowa.

The Trans-Mississippi Grain Co. is having repairs made on its elevator at Holstein, Iowa. Seeley, Son & Co. of Fremont, Neb., are doing the work.

Chas. Counselman & Co., Gowrie, Iowa, have purchased 2 No. 0 Victor Corn Shellers and 2 No. 0 Cornwall Corn Cleaners from the Barnard & Leas Mfg. Co.

The Dyersville Milling & Grain Co., Dyersville, Iowa, has been organized with a capital stock of \$10,000, to buy and sell grain and operate a steam flour and feed mill.

Brown & Son of Britt, Iowa, have sold their grain and hay business to C. M. Gowdy of that place, who is now in possession. Brown & Son will continue their machinery business.

The Kinsella Grain Co. are having the elevator at Blencoe, Iowa, which they recently purchased, enlarged and repaired. The work is being done by Seeley, Son & Co. of Fremont, Neb.

#### WISCONSIN AND MINNESOTA.

A second elevator is now nearing completion at Klossner, Minn.

The Imperial Elevator Co. is building an elevator at Donaldson, Minn.

C. J. Suckow will build an elevator in connection with the mill at Barton, Wis.

The Minnesota & Western Elevator Co. will erect an elevator at Willmar, Minn.

Glover, McNally & Co., New Richmond, Wis., will build an elevator at Deer Park.

The Kickbusch Roller Mills, Wausau, Wis., are about to build a 20,000-bushel grain elevator.

The Jackson Milling Co., Stevens Point, Wis., will increase its elevator capacity 10,000 bushels.

The Crown Elevator Co. of Faribault has purchased the Merchants' Elevator at Renville, Minn.

A 25,000-bushel elevator has been completed at Red Wing, Minn., for the Rothschild Grain Co., Davenport, Iowa.

Osborne & McMillan are building an elevator at South Haven, Minn., which they expect to have completed by June 1.

Work is in progress on the new 30,000-bushel Farmers' Elevator at Faribault, Minn., and it is now nearly completed.

The St. Anthony & Dakota Elevator Co. are installing a 10 h. p. Otto Gasoline Engine in their elevator at Euclid, Minn.

The Minnesota Elevator Co. of Winona have a new elevator at Vesta, Minn., equipped with the Hall Grain Distributor.

The Interstate Elevator Co. has purchased from the Morris Investment Co. the strip of land at Morris, Minn., on which their elevator stands.

The Amenias & Sharon Land Co. have decided to increase the storage capacity of their cleaning elevator at West Superior, Wis., from 35,000 to 100,000 bushels.

The Eagle Mill Co., New Ulm, Minn., has let the contract to Honstain Bros., of Minneapolis, for the erection of a 200,000-bushel elevator to be completed by August 1.

Brown Bros. of Janesville, Wis., have sold 150 tons of ear corn to the Blodgett Milling Co. The corn was purchased in 1894 and 1895 and is said to be in excellent condition.

G. F. Thomas of Lester Prairie, Minn., has sold his elevator at that place and also at Mayer to Nels Enge of Minneapolis. He will make a tour of the Pacific Coast and expects to locate elsewhere on his return.

Nye, Jenks & Co. of Milwaukee have leased the new 1,500,000-bushel Omaha Elevator at West Superior, Wis. The house began receiving grain the latter part of April. The company has opened offices in Board of Trade Building at Duluth.

The Daily Herald of Austin, Minn., is urging the business men of that town to build an elevator and conduct it on the co-operative plan, so that they can pay more for grain than any of the neighboring markets, which are rapidly increasing in number

and attracting the farmers' grain and their other trade along with it.

The Strong & Northway Mfg. Co. of Minneapolis have purchased a No. 1 Little Victor Corn Sheller and Cleaner from the Barnard & Leas Mfg. Co.

Work was begun last month at Duluth on a 3,750,000-bushel grain elevator for the Peavey Grain Co. It will be the first concrete-construction elevator in America, and the largest grain elevator in the world under one roof. It will give the Peavey Company 11,000,000 bushels of storage room at the head of the lakes.

#### WESTERN.

C. R. Beach has bought the interest of his partner in the grain firm of Beach & Adams at Fruita, Colo.

H. R. Quillitch & Bro. have succeeded to the grain branch of H. R. Quillitch's grain and implement business at Trinidad, Colo.

J. W. Walls of Santa Ana, Cal., has sold his interest in the hay, grain and oil business to his partner, Geo. E. Robinson, and bought an interest with Geo. Wilton in the same line of business.

Schwabacher & Broughton of Dayton, Wash., have dissolved partnership, Louis Schwabacher selling out his interest in the firm's lands, warehouses and business property to his partner, Chas. J. Broughton.

M. Strain of Lamar, Colo., has sold to D. B. Nowels, W. Robinson, John W. Paxton and Geo. W. Burke his extensive seed, grain, coal and transfer business at that place. The new owners take possession June 1.

W. Clifford, late manager of the Shawnee Warehouse Co., has been found guilty at Colfax, Wash., of appropriating the proceeds of two carloads of barley. He is also charged with embezzling eight carloads of wheat.

Galbraith, Bacon & Co., the wholesale grain, hay and feed merchants of Seattle, Wash., are building a new dock 325 feet long and 130 feet wide with slips on both sides. The building will be 309 x 80 feet. It will be completed early in June, when they will move their hay presses, feed mill and entire business there.

The Union of Walla Walla, Wash., reports some recent notable sales in that section as follows: "Thursday afternoon Ernest Dunnington sold 10,000 sacks of A1 bluestem wheat, f. o. b. at Walla Walla, at 47 cents. This was a choice lot of wheat and brought a premium. The Dunnington brothers sold at the same time 6,500 sacks bluestem grading as No. 1 club, at 44 cents, f. o. b. at Russell Station. This is the best sale of wheat reported during the past 30 days."

The Northern Pacific Railway has commenced work on its water front in Tacoma, Wash., and will complete by September 1 three grain warehouses, two of which will be of 750,000 bushels' capacity each and the other 500,000 bushels. They will be 143 wide with a total length of 1,700 feet, separated by brick fire walls. These warehouses have been leased in advance to the three largest grain exporting firms on the Pacific Coast, namely, Balfour, Guthrie & Co., San Francisco and Tacoma; Geo. W. McNear & Co., San Francisco, and Kerr, Gifford & Co. of Portland. The harbor will be dredged to afford a 25-foot channel at low tide.

#### CANADA.

W. J. McCart has built a granary at Cornwall, Ont.

It is rumored that the Grand Trunk Ry. may also build an elevator in Quebec.

J. J. Davis is building a feed warehouse at North Toronto, and will install a feed chopping outfit.

Martin, Warnock & Co., whose elevator and mill was destroyed in the big Ottawa fire, are preparing to rebuild.

It is reported that the Ogilvie Milling Co. will build 12 elevators at various points in Manitoba this year.

The Deloraine Farmers' Elevator Co. of Deloraine, Manitoba, has applied for incorporation with a capital stock of \$10,000.

E. J. Chamberlain, general manager of the Canada Atlantic Ry. Co., has opened negotiations with the Montreal Harbor Commissioners for a grant of one of the new piers on which to erect a 2,000,000-bushel elevator, warehouses, distributing galleries, etc. It is not at all certain, however, that arrangements can be made for building the elevator this year.

The Weller Mfg. Co. of Chicago, Ill., has the contract for rope transmission, rope drive and all the grain handling machinery for the new 1,000,000-bushel elevator which the Great Northern Railroad Company is building at Quebec, Canada. Work was commenced on the elevator the first part of

April and it is expected it will be completed about the last of August. A. F. Chapman & Co. of Buffalo, N. Y., are the contractors and builders. The Great Northern Elevator Co. has been incorporated to operate this house.

On May 7 the Montreal Harbor Commissioners at their weekly meeting discussed the Connors elevator question. The secretary reported that a letter had been received from the Hon. W. Mulock, acting minister of public works, at Ottawa, stating that he had received from the Connors syndicate a communication inclosing the plans of a one million bushel elevator, which it was proposed to build on the Windmill Point pier, and stating that the plans showed a working house of 1,000,000 bushels' capacity, capable of weighing and storing grain at a rate of not less than 25,000 bushels an hour, and discharging at the rate of 60,000 bushels an hour. Hon. Mr. Mulock desired to be informed as to the views of the Harbor Commissioners with regard to the plans submitted by the syndicate.

The secretary stated that since last Thursday's special meeting of the board he had been furnished by the syndicate with the specifications of the one million bushel elevator, but not with those of the two million bushel storage house, the plans of which had not yet been completed.

The members decided that they could not give the government a report until the plans for the storage house were received, and after further discussion it was decided to send a deputation to Duluth to inspect a combination elevator of the kind that the Connors syndicate proposes to erect. The deputation consists of the mayor, Mr. Robert Bickerdike, Mr. James Crathern, Mr. E. H. Lemay and Harbor Engineer Kennedy.

## CROP REPORTS

From nearly all parts of Texas reports are to the effect that the crop prospects for small grain were never better.

Rice planting in the Beaumont, Texas, section has been greatly retarded by wet weather, but a full crop will finally be put in.

The harvest in Southeastern Kansas will be unusually early this year. From all parts of the state come highly favorable reports and it is expected that a record-breaking wheat crop will be harvested.

The grain expert of the Manufacturers' Record estimates that 10 Southern states, not including Kentucky and Tennessee, will show a deficiency in their corn requirements of over 125,000,000 bushels.

OKLAHOMA.—Late reports state that no better prospects for wheat were ever seen in the territory. Wheat has had a rank growth and is commencing to head. The crop is estimated at 30,000,000 bushels.

WISCONSIN.—Seeding is nearly completed and early sown grain germinating well. Much winter wheat and clover are being plowed up and sown to other crops. Winter rye doing well. Pastures are growing rapidly.

THE DAKOTAS.—The crops in South Dakota are reported to be in fine condition. In North Dakota the spring was unusually favorable for planting. Early this month, however, dry weather, frosts and high winds were not altogether favorable for the young wheat.

NEBRASKA.—The Nebraska crop bulletin of May 8 says rapid progress is being made in corn planting and grass, wheat and oats have grown rapidly and are in excellent condition. Other reports indicate that everything thus far is favorable to a magnificent yield.

A late report from the Walla Walla Valley, Wash., states that the harvest promises to be three weeks in advance of 1899, and the yield of wheat greater than ever before. Barley is heading out and rye is also so well advanced that a large yield is assured. The Palouse country reports more than an average crop of wheat with less than the usual acreage.

A report from San Francisco says: In the Sacramento valley an excellent wheat yield is anticipated. In the San Joaquin valley and the coast and bay sections the outlook is not quite so good, but an average crop is expected. Southern California has been benefited in a few sections by the rains, but failure is predicted in the larger part of the territory.

Frosts were observed on the mornings of the 3d, 4th and 5th, at various localities in the northern and central districts of Iowa and on the morning of the 3d the minimum temperature at numerous stations was below 32 degrees, causing the formation of ice on shallow water in many places; but on the whole little damage was done. On May 7 nearly all corn ground was in readiness for planting, and a fair start has been made. The needed moisture was generally supplied by the copious



showers of the 5th and 6th, and the crop outlook at present is quite flattering.

INDIANA.—Reports from all parts of the state, with an occasional exception, agree that the winter wheat crop cannot exceed 25 to 35 per cent of an average one. Much wheat is being plowed up and planted to corn and oats. In some few localities the warm showers are improving the grain and 50 per cent of a crop is looked for.

The Winnipeg Commercial of May 5 says of the crops of Manitoba: "Another week of dry weather has enabled farmers to get in most of their coarse grain seed, vegetables, etc., and to finish up their wheat seeding where that was not done last week. The country is now ready for some good soaking rains and would be the better for it." In Eastern Ontario the need of warmer weather and more rain is also noted. Seeding was done earlier than usual throughout Canada.

MISSOURI.—Corn planting was considerably delayed by frequent heavy rains. State Weather Bureau report of May 1 says: Weather has continued exceptionally favorable for wheat, oats and grasses, and outlook for those crops unusually promising. Some wheat in southwestern counties in boot, and in Perry County some fields are heading. In some districts there is danger that wheat will become too rank and fall. Pastures, in most sections, now afford sufficient feed for live stock. Flax, in southwestern counties, doing well.

The weather bureau's weekly report for May 10 says the Northwest generally needs rain and that the cool, dry weather had retarded corn planting in the Ohio and Mississippi valleys. Owing to low temperatures and absence of rain winter wheat made slow progress in the states of the Ohio Valley, and complaints of serious injury by fly in Tennessee and rust in South Carolina and Georgia were reported. In the middle Atlantic states and generally to the west of the Mississippi the crop made good progress, the reports from the Pacific Coast being especially favorable. Some slight damage to spring wheat by heavy frost and high wind was reported from North Dakota, and the late sown in Wisconsin needed rain, but generally throughout the spring wheat region the crop was doing well. The previously reported favorable outlook for oats continued unimpaired, except slight deterioration in portions of the Ohio and Mississippi valleys, where growth had been checked by cool, dry weather.

OHIO.—The last Ohio State Crop Report says: Returns from many localities indicate that the harvest will not yield a quantity equal to the seed sown, and thousands of acres have been plowed up. The crop will be the smallest since 1896, when the total product was 17,000,000 bushels, or 8½ bushels to the acre. The estimate for this year is 16,000,000 to 18,000,000 bushels. Ohio has produced in the last ten years six crops above 50,000,000 bushels each, the crop of 1894 averaging 20 bushels to the acre. The causes of the present condition are the Hessian fly and the hard winter. The crop this year, as compared with an average, will be 41 per cent. Spring barley, area same as compared with last year, 106 per cent; winter barley, condition, 58 per cent; area sown last fall for harvest of 1900, 28 per cent; sown this spring for harvest of 1900, 72 per cent; Rye condition compared with an average, 68 per cent; Oats, area sown in 1899, 905,703 acres; sown this year as compared with last, 115 per cent; estimated area for harvest this year, 992,215 acres. Clover area sown this year as compared with last, 90 per cent.

ILLINOIS.—The Illinois Department of Agriculture on May 10 issued the following summary of crop reports received for May 1: Wheat—In Northern Illinois the condition is 90 per cent, in Central Illinois 84 per cent, and in the southern division of the state 83 per cent. About 14 per cent of the area seeded last fall was winter killed or otherwise destroyed, leaving 1,700,000 acres for harvest—500,000 acres more than was harvested in 1899. The winter killed in the northern and southern divisions of the state was 12 per cent and in the central division 17 per cent. On the whole the present prospect for wheat in Illinois is excellent. As large an area of spring wheat has been seeded this year as last and the May 1 condition is above an average. Rye—In Northern Illinois 14 per cent of the rye seeded last fall was winter killed and in the southern division 13 per cent, while in Central Illinois but 6 per cent was destroyed. The area for harvest will be about 97,000 acres. The May 1 condition of this crop in Northern and Central Illinois is 95 per cent of a seasonable average, but only 86 per cent in the southern division of the state. Oats—There has been quite an increase in the area sown to oats in Illinois this year, which is the largest reported for a number of years. In Northern Illinois there is a deficiency in area of 1 per cent as compared with 1899, but in Central Illinois the increase is 86 per cent and in the southern division of the state 6 per cent. The May 1 condition of the crop is 93 per cent of a seasonable average, much better than one year ago. The season generally has been favorable to oat sowing and there is encouragement for the

largest oat crop produced in the state for many years.

The broom corn acreage in the Central Illinois district is reported to be nearly double that of last year.

The Daily Trade Bulletin, Chicago, up to May 5 received reports from millers and others in the principal winter wheat states. Taking the government acreage in most instances, except in Kansas, it suggests a yield of 380,297,000 bushels. The acreage in Ohio and Michigan has been reduced one-third by plowing up, and the estimated yield is 38,000,000 bu, compared with 78,694,000 bushels last year, and a possible yield of 120,000,000 bushels on the area seeded last fall. These states will produce only 32 per cent of a full crop. The prospects are unusually good in Missouri, Kansas and Oklahoma, with a large area. The reports indicate a general condition of 84, and advices from Canada give an average condition of 87.5. The detailed reports by states, giving the acreage and yield, is as follows:

States—	Acre.	Bu.	Yield, bu.
New York .....	410,000	13.8	5,658,000
Pennsylvania .....	1,660,000	12.8	21,248,000
Maryland .....	783,000	13.5	10,570,000
Virginia .....	800,000	10.6	8,480,000
Texas .....	1,272,000	14.0	17,808,000
Tennessee .....	1,212,000	12.8	15,514,000
West Virginia .....	459,000	10.5	4,820,000
Kentucky .....	967,000	13.6	13,151,000
Ohio .....	1,721,000	8.5	14,628,000
Michigan .....	1,058,000	10.2	10,791,000
Indiana .....	1,800,000	7.0	12,600,000
Illinois .....	1,796,000	15.7	28,197,000
Wisconsin .....	309,000	9.3	2,874,000
Iowa .....	87,000	13.5	1,475,000
Missouri .....	1,570,000	15.0	23,550,000
Kansas .....	4,715,000	18.7	88,170,000
Nebraska .....	155,000	14.4	2,232,000
Washington .....	513,000	19.8	10,157,000
Oregon .....	559,000	18.0	10,062,000
California .....	3,357,000	13.5	45,219,000
Oklahoma .....	1,001,000	17.0	17,017,000
Other states .....	2,047,000	8.0	16,376,000
Totals .....	28,251,000	13.4	380,297,000

MICHIGAN.—The Michigan State Crop Report, issued May 9, gives the following information: The weather during April was on the whole favorable for the growth of wheat and grass. Wheat—The average condition of wheat in the southern counties is 49, while April 1 it was 60. This is a fair indication of the condition of the wheat crop of Michigan since, during the last twenty years, 85 per cent of the crop has been grown in these counties. The average condition of wheat for the central counties is 58, for the northern counties 72, and for the state 54. On the whole the condition of wheat is fully 10 points lower than one month ago. The per cent of wheat sown in the southern counties that will be plowed up because winter killed is 18, in the central counties 18, in the northern counties 8, and for the state 16. Many fields that otherwise would have been plowed up have been left because seeded to clover and timothy. The damage by Hessian fly in per cent is, in the southern counties 35, in the central counties 22, in the northern counties 8, and for the state 30. One year ago the damage to wheat by the Hessian fly was reported as 6 per cent, which demonstrates that the damage done by these insects is increasing and that unless natural causes stop their ravages, some systematic work must be done by the farmers in order to prevent, if possible, the ruination of such an important crop so frequently. The total number of bushels of wheat reported marketed by farmers in April at the flouring mills is 320,760, and at the elevators 200,630, or a total of 521,390 bushels. Clover.—The condition of meadows and pastures in the southern counties is 84, in the central counties 88, in the northern counties 96, and for the state 86. The acreage of clover sown, as compared with 1899, is 95. The acreage of clover that will be plowed up because winter killed or otherwise damaged is, in the southern counties 14, in the central counties 7, in the northern counties 3, and for the state 11. Oats—In some parts of the state the oats were not all sowed by the first of May on account of the land not being in condition to till. The acreage of oats sown, in the southern counties, as compared with 1899, is 95, in the central counties, 96, in the northern counties 99, and for the state 96.

Returns to the statistician of the Department of Agriculture made up to May 1 show the area under winter wheat in cultivation on that date to have been about 26,585,000 acres, or 3,563,000, or 11.8 per cent less than the area estimated to have been sown last fall. The reduction in acreage in the principal states, owing to winter killing and the ravages of the Hessian fly, is as follows: Indiana 1,608,000, Ohio 969,000, Michigan 317,000, Pennsylvania 158,000, and Illinois 137,000 acres. For the area remaining under cultivation the average condition on May 1 was 88.9. While this average is 6.2 points above the mean of the averages of the last ten years and has been exceeded only three times in fifteen years, it must be remembered that the acreage plowed up, cut for forage (except in

California, where it is not yet definitely ascertainable) or otherwise abandoned, has been entirely eliminated. The high averages of condition reported last month for Kansas, Missouri, Texas and other more or less important wheat producing states that have escaped the ravages of the fly have been fully maintained, and on May 1 nearly one-half of the entire winter wheat acreage remaining under cultivation reported a full normal or still higher condition. The average condition of winter rye on May 1 was 88.5, as compared with 85.2 on May 1, 1899, 94.5 on May 1, 1898, and 89.7, the mean of the May averages for the last ten years. Pennsylvania and New York, with 42.1 per cent of the total winter rye acreage of the country, report conditions 11 points and 4 points, respectively, below their ten-year averages. Kansas, which ranks third in the scale of acreage, reports the high average condition of 107, the highest average reported on May 1 of which there is any record. The average condition of meadow mowing lands on May 1 was 90.8, against 84.9 on May 1, 1899, 92.9 on May 1, 1898, and 91.3, the mean of the May averages of the last ten years; that of spring pasture was 91.3, against 83.5 on May 1, 1899, 91.2 on May 1, 1898, and 90.9, the mean of the May averages of the last ten years. Spring plowing is more or less late in almost every state in which its condition is a matter of any especial significance. The only notable exceptions are Pennsylvania, Kentucky, Illinois, Kansas, Missouri and Arkansas. The work already done in the country at large is estimated at 68.4 per cent of the total contemplated, the proportion usually done by May 1 being about 75 per cent of the whole. In South Carolina, Alabama, Mississippi and Texas the work is later than in any year for which records are available.

#### THE WORLD'S WHEAT CROP.

Hon. John Hyde, statistician of the Department of Agriculture, gives the following statistics of the wheat production of the world for some years past:

	1897.	1898.	1899.
United States .....	530,149,000	675,149,000	547,304,000
Ontario .....	28,765	33,042,000	22,158,000
Manitoba .....	18,837,000	26,112,000	28,802,000
Rest of Canada .....	7,500,000	9,000,000	9,000,000
Totals, Canada .....	56,102,000	58,154,000	59,960,000
Mexico .....	9,700,000	15,000,000	15,000,000
Totals, N. America .....	595,951,000	758,303,000	622,264,000
Chile .....	10,500,000	14,000,000	13,000,000
Argentina .....	25,413,000	46,000,000	92,167,000
Uruguay .....	3,600,000	6,000,000	7,164,000
Totals, S. America .....	39,510,000	66,603,000	112,331,000
Great Britain .....	56,672,000	75,330,000	67,594,000
Ireland .....	1,355,000	1,856,000	1,731,000
Totals, U. Kingdom .....	58,027,000	77,186,000	69,325,000
Norway .....	300,000	300,000	260,000
Sweden .....	4,678,000	4,642,000	4,430,000
Denmark .....	3,474,000	2,931,000	3,500,000
Netherlands .....	4,290,000	5,000,000	4,300,000
Belgium .....	11,967,000	14,069,000	12,400,000
France .....	246,596,000	363,498,000	366,079,000
Spain .....	94,637,000	99,000,000	88,000,000
Portugal .....	8,200,000	7,800,000	6,400,000
Italy .....	86,919,000	137,345,000	137,912,000
Switzerland .....	4,300,000	4,300,000	4,200,000
Germany .....	119,903,000	132,567,000	141,369,000
Austria .....	35,859,000	47,367,000	42,385,000
Hungary .....	83,580,000	128,140,000	138,060,000
Croatia-Slavonia .....	6,271,000	11,408,000	9,500,000
Bosnia-Herzegovina .....	2,000,000	2,100,000	2,000,000
Totals, Aus.-Hung. .....	127,720,000	189,005,000	191,842,000
Rumania .....	36,448,000	58,467,000	26,064,000
Bulgaria .....	30,739,000	35,000,000	24,000,000
Servia .....	12,500,000	11,000,000	8,500,000
Montenegro .....	200,000	220,000	200,000
Turkey in Europe .....	17,800,000	25,000,000	15,000,000
Greece .....	3,200,000	4,000,000	2,000,000
Russia proper .....	238,557,000	334,246,000	314,376,000
Poland .....	17,308,000	21,891,000	21,544,000
North Caucasus .....	28,883,000	52,251,000	57,813,000
Finland .....	90,000	100,000	90,000
Totals, Russia in Europe .....	286,338,000	408,258,000	393,823,000
Totals, Europe .....	1,158,236,000	1,679,768,000	1,499,604,000
Siberia .....	42,835,000	36,157,000	45,473,000
Central Asia .....	11,087,000	14,944,000	14,385,000
Trans-Caucasia .....	40,000,000	40,000,000	33,000,000
Totals, Russia in Asia .....	93,922,000	91,101,000	93,411,000
Turkey in Asia .....	48,000,000	44,000,000	35,200,000
Cyprus .....	2,400,000	2,400,000	2,000,000
Persia .....	20,000,000	17,600,000	16,000,000
British India .....	191,257,000	250,670,000	232,585,000
Japan .....	19,509,000	20,000,000	20,000,000
Totals, Asia .....	375,088,000	434,771,000	399,136,000
Algeria .....	24,138,000	24,138,000	15,000,000
Tunis .....	5,000,000	5,000,000	4,800,000
Egypt .....	12,000,000	14,000,000	14,000,000
Cape Colony .....	2,200,000	2,012,000	2,000,000
Totals, Africa .....	37,200,000	46,630,000	35,800,000
West Australia .....	252,000	421,000	892,000
South Australia .....	2,893,000	4,141,000	9,056,000
Queensland .....	620,000	1,041,000	626,000
New South Wales .....	9,132,000	10,893,000	9,579,000
Victoria .....	7,315,000	10,914,000	20,198,000
Tasmania .....	1,327,000	1,721,000	2,576,000
New Zealand .....	6,113,000	5,949,000	13,486,000
Totals, Australasia .....	27,652,000	34,980,000	56,212,000
RECAPITULATION BY CONTINENTS.			
North America .....	595,951,000	758,303,000	622,264,000
South America .....	39,510,000	66,603,000	112,331,000
Europe .....	1,158,236,000	1,679,768,000	1,499,604,000
Asia .....	375,088,000	434,771,000	399,136,000
Africa .....	37,200,000	46,630,000	35,800,000
Australasia .....	27,652,000	34,980,000	56,212,000
Totals .....	2,233,637,000	2,921,045,000	2,725,407,000



# The EXCHANGES

Subscriptions amounting to some \$4,000 were taken up among members of the Chicago Board of Trade for the relief of the fire sufferers at Hull and Ottawa, Canada.

The directors of the Chicago Board of Trade, acting on a recommendation of the Transportation Committee, have decided to abolish the freight traffic bureau on June 1.

An open board of trade has been organized by certain members of the St. Louis Merchants' Exchange and will hold daily sessions at No. 214 Pine Street. The promoters claim that by reason of its location it does not violate the rules of the Exchange, but this claim is likely to be contested.

The request of the Armour Elevator Co. to have their St. Paul Elevator at Chicago made regular was refused by the directors of the Board of Trade. Because of its being located on only one railroad and having but one side track they feared shippers might be injured by too much delay being occasioned in unloading.

The thirteenth annual report of the trade and commerce of Peoria, Ill., for the year 1899, compiled for the Peoria Board of Trade by Robert C. Grier, secretary, is received. Its sixty pages contain the usual interesting trade statistics and other valuable information. The membership roll shows a total of ninety-nine members.

The proposed amendment to Rule 4, of the Chicago Board of Trade, making it "unmercantile conduct and punishable as such for a member of this association to make himself a party to any transaction in which a violation of the interstate commerce law is contemplated or involved," was defeated April 23, by a vote of 680 to 145.

We are under obligations to Denison B. Smith for a copy of the forty-first annual report of the trade, commerce and manufacturing of the city of Toledo for the year 1899 as compiled by him for the Toledo Produce Exchange. The report not only thoroughly covers the business of Toledo, but also gives a large amount of general statistical information of commercial value.

We have received a copy of the forty-fifth annual report of the Baltimore Chamber of Commerce for the year ending Dec. 30, 1899. The book contains over 200 pages and is replete with statistics of the production, movement and export of cereals of all kinds. The report of President J. Hume Smith expresses the desire that the B. & O. R. R. provide an additional elevator of 2,000,000 bushels' working capacity.

The directors of the Chicago Board of Trade have rescinded the second paragraph of the advisory rulings of March 21 and have substituted therefor the following: "The establishment of branch offices or the employment of solicitors on salaries only will not be considered as a violation of Rule XIV, provided that all business shall be conducted only in the name of the parent firm or member and said firm or member shall be responsible to customers in every transaction and also for the conduct of the employee."

The grain committee of the Cincinnati Chamber of Commerce was recently called upon to settle a friendly controversy between the Union Grain & Hay Company and Maguire & Co. The latter sold the former three cars of corn, and declined to accept the settlement after the Union Grain & Hay Company had deducted a dollar a car for weighing, because it had been weighed by the purchaser. Maguire & Co. based their claim on the rules of the Chamber and the purchaser on custom. The committee found in favor of Maguire & Co.

C. A. King & Co.'s market report dated Toledo, May 8, says: "Fire sales here will all be settled alike. Directors of the Exchange so decided yesterday. All grain or clover seed affected by fire here shall be considered sold for the owner's account at the price agreed upon with the insurance adjusters at the time of the fire. The closing price is the one agreed upon, where the fire occurs after the close and before the market opens the next day. This rule is merely passed so those who have grain or clover seed stored here may know what to expect in case their goods are in the fire. It has been the general custom."

The grain section of the Toronto Board of Trade, at a meeting held on May 7, unanimously passed the following resolution: "That the grain section of the Board of Trade of the city of Toronto would respectfully urge the railways to arrange that grain shipped from Ontario consigned to Montreal be allowed to stop over at central points for inspection in a similar way as has been customary when consigned to Portland and St. John, and that same be

stored in Montreal on arrival without re-inspection." Messrs. M. McLaughlin, W. D. Matthews, H. N. Baird and Robert Hay were named as a committee to carry the resolution into effect.

A carload of corn donated by the people of Waverly, Kan., to the India famine sufferers, and consigned to Richardson & Company, was auctioned off on the Chicago Board of Trade at the close of the market on May 10 by Secretary Stone. There was little interest manifested by the members and finally Messrs. Richardson & Co. bid in the entire 1,600 bushels at 65 cents. The Santa Fe Railroad donated the freight, so that over \$1,000 will go to the relief fund.



A. W. Smith has opened a hay and feed store at Republic, Wash.

Wm. Stillwell has opened a hay and feed store at Atlantic Highlands, N. J.

John Findley will build a two-story brick building, 25x70 feet, adjoining his mill at Salina, Kan., to be used for the storage of hay and feed.

Louis Brunelle, of Labelle, Quebec, has made a demand of assignment on Louis Roch & Co., hay dealers. The liabilities are estimated at about \$7,000.

Hisey & Harnden, hay dealers, of Yale, Mich., have dissolved partnership. The business of the firm will be continued by James Hisey, who will pay all debts and collect all bills.

A large cargo of hay and straw on the Hudson River barge R. Miller, lying at the foot of West Thirty-fourth Street, New York, was burned April 21. The loss was covered by insurance.

There is a scarcity of timothy hay in the Chicago market and a choice article is likely to command a fancy price before new stock comes in. Present quotations are around \$12.50 at track sales.

The National Stockman advocates as substitutes for hay the use of oats cut green and fed unthrashed with corn fodder, sorghum, Kaffir corn, the soy bean and rape, but says there is no new substitute for hay.

Imports of hay from Canada to the United States from September, 1899, to February, 1900, inclusive, are reported by O. P. Austin, Chief of the Bureau of Statistics of the Treasury Department, as 54,271 tons, valued at \$376,597.

A shipment of hay, said to be the largest ever made from this country, went from New York to Cape Town recently. It consisted of 32,000 bales of compressed hay, which was grown mostly in Canada and baled in New York.

A table compiled by the Hay Trade Journal shows that the highest prices for hay in the principal markets of the United States on May 4, 1900, varied from \$13.50 at St. Louis and \$14.50 at Memphis, to \$18.50 at Philadelphia, Providence and Jersey City.

Prices of hay in Southern Indiana and Northern Kentucky show a marked advance over the prices last year at this time—from 45 cents per hundred pounds to 90 cents per hundred. The scarcity in local markets is so great that baled hay is being shipped in.

New Orleans is now an important export point for hay, shipments being made to Cuban and Mexican ports and to South Africa. It is even claimed by some authorities that New Orleans is destined to become the most important hay export center on this continent.

The scarcity of No. 1 and No. 2 timothy hay at country points, and the prevailing high prices have put hay pressers out of business until the new crop comes in. Farmers will not sell at prices low enough to make pressing profitable and pressers refuse to run the risk of putting in large stocks at present prices in the face of the oncoming new crop.

The exports of hay from Canada for the fiscal year ending June 30, 1899, amounted to 62,428 tons, valued at \$411,631, as compared with 37,144 tons, valued at \$358,614, during the previous year. The exports for the current fiscal year will show a much larger increase, both as regards quantity and value. The Montreal Trade Bulletin reports a recent sale of 209 tons of choice No. 2 in the country

at \$7.50 f. o. b., and six cars at \$7 f. o. b. Canadian farmers seem to have cleaned up their stocks pretty thoroughly.

A hay press factory is being erected at Huntsville, Tenn. The new plant will be owned and operated by local capital, under the leadership of Senator E. L. Pelley, and will employ a large number of men in the manufacture of the New South Hay Press invented by Charles Drake.

The warehouse of the Mississippi Valley Hay Storage Company, at Branch and Second streets, St. Louis, was destroyed by fire May 4. The building contained 150 carloads of hay, all of which was consumed. The loss on the building was about \$20,000; insurance, \$11,000. The hay in storage belonged to various commission firms and was insured by them. The loss on hay was about \$25,000.

Straw has sold as high as 30 cents per hundred-weight in New York this winter for the best long rye. The consumption seems to be increasing. Large quantities of straw are used by the straw-board mills; the choicest quality is used in private stables of wealthy men, who are able to pay fancy prices for it. The most profitable straw to raise and handle is the long rye of unusual length and bright golden color.

Chief Quartermaster J. G. C. Lee, of the United States Army, has advertised for bids on hay and straw for the fiscal year, commencing July 1, 1900. The points of delivery are Forts Brady and Wayne, Mich.; Columbus Barracks, Ohio; Fort Sheridan and Chicago, Ill., and Fort Thomas, Ky. Proposals for other points also will be entertained. Blanks and particulars may be obtained from any of the quartermasters of the posts above named, or at headquarters. Proposals will be received until June 12, 1900.

## REVIEW OF CHICAGO HAY MARKET.

The prices ruling for hay in the Chicago market during the past four weeks, according to the Daily Trade Bulletin, were as follows:

During the week ending April 21 sales of Choice Timothy ranged at \$12.25@13.50; No. 1, \$11.50@12.50; No. 2, \$11.00@11.75; Not Graded, \$9.00@11.50; Choice Prairie, \$9.50@10.50; No. 1, \$7.00@9.75—outside for Iowa and Kansas; No. 2, \$6.75@7.00; No. 3, \$6.00; No. 4, \$5.50. Rye straw sold at \$8.00@8.25, and oat straw at \$6.00@6.50. The receipts for the week were 3,973 tons, against 4,009 tons for the previous week. Shipments for the week were 227 tons, against 164 tons for the previous week. Only a moderate business was transacted during the week. The arrivals of Timothy Hay were quite small and the demand was quite brisk. Prairie Hay ruled steady, the receipts being only moderate and the demand fair.

During the week ending April 28, sales of Choice Timothy ranged at \$13.50@15.25; No. 1, \$12.50@14.50; No. 2, \$11.75@13.00; No. 3, \$10.50@11.00; Not Graded, \$10.00@13.50; Thrashed, \$11.00; Clover Hay, \$11.50; Choice Prairie, \$9.50@10.50; No. 1, \$7.50@9.75—outside for Iowa and Kansas; No. 2, \$7.00@8.25; No. 3, \$6.00. Rye straw sold at \$8.00@9.00, and oat straw at \$6.00@7.00. The receipts for the week were 2,702 tons, against 3,973 tons for the previous week. Shipments for the week were 55 tons, against 227 tons for the previous week. The market for Timothy Hay was very firm and prices advanced \$1.00@1.50 per ton. Arrivals were small, the local demand urgent and all consignments met with a ready sale. The market for Prairie Hay was also firm, but prices were not particularly higher.

During the week ending May 5, sales of Choice Timothy ranged at \$12.50@14.00; No. 1, \$11.50@13.00; No. 2, \$10.00@12.00; No. 3, \$10.00; Not Graded, \$8.00@11.00; Choice Prairie, \$9.50@11.00—outside for fancy Iowa; No. 1, \$9.00@9.75; No. 2, \$7.00; No. 3, \$6.00@6.50. Rye straw sold at \$8.00@8.50, and oat straw at \$6.00@6.50. The receipts for the week were 4,597 tons, against 2,702 tons for the previous week. Shipments for the week were 33 tons, against 55 tons for the previous week. Quite a reaction occurred in the market for Timothy Hay during the week. The offerings became larger and the demand exceedingly light. Buyers held off for a decline. The close of the week was steadier. Prairie Hay was comparatively steady. The arrivals were liberal and demand fair for bright Kansas and Iowa.

During the week ending May 12 sales of choice timothy ranged at \$12.50@13.50—outside for fancy; No. 1, \$12.00@13.00; No. 2, \$10.25@11.50; No. 3, \$9.00; Not Graded, \$8.00@11.50; Clover Hay, \$9.00; Choice Prairie, \$9.50@11.00; No. 1, \$8.50@10.00; No. 2, \$6.50@7.00; No. 3, \$6.00; No. 4, \$5.00. Rye Straw sold at \$8.00@9.00, Wheat Straw at \$6.00, and Oat Straw at \$5.50@6.50. The receipts for the week were 3,950 tons, against 4,597 tons for the previous week. Shipments for the week were 152 tons, against 33 tons for the previous week. A quiet and rather dull market for both Timothy and Prairie Hay was experienced during the week. The arrivals were large and the demand only fair. Very little inquiry for shipment and prices exhibited no material change.



# OBITUARY

Dwight W. Slaughter, a grain and lumber dealer of Amboy, Ill., is dead.

Cornelius Brown, a prominent grain dealer and farmer of Silex, Mo., died April 12 from pneumonia.

Peter Endres died at his home in Hampton Station, Minn., April 5. He was interested in the elevator business.

Adam Scott died May 8 at Amesbury, Mass., aged 52 years. He was the leading partner in the Scott Grain Company of Amesbury. A widow, two sons and a daughter survive him.

Ambrose A. Whittemore, a grain dealer of South Sudbury, Mass., died April 9, after an illness of several months. He had been in the grain business in South Sudbury about two years, coming from Rhode Island.

Sylvester Perry Decker died at his home in Ashland, Neb., April 11, aged 58 years. Mr. Decker was born in Pennsylvania, and moved to Nebraska in 1857. In 1870 he engaged in the grain business at Ashland, where he has resided ever since.

George J. Richards, a member of the firm of A. J. Richards & Son, grain and coal dealers of Weymouth and Quincy, Mass., died at his home in Weymouth, April 18, from typhoid pneumonia, following the grip. He was 33 years of age and unmarried.

Charles G. Clark, who, with his sons, Charles and Edward, for many years conducted a grain and lumber business in Carthage, Ia., died recently. He settled in Carthage in 1863, when the town was comparatively new, and accumulated a large amount of property.

Eli Hawks of Juneau, Wis., died in that city, April 10. Mr. Hawks was born in Madison County, N. Y., seventy-one years ago. He settled in Juneau in 1855, and engaged in the grain business and erected the first elevator in that section. A few years ago he sold out his grain business and was appointed postmaster of Juneau.

William H. Adlard, a well-known grain buyer of Fletcher, Ohio, died at his home in that place April 19, after a short illness of pneumonia. Mr. Adlard was born in Canal Dover, Ohio, thirty-eight years ago. He had been in the grain business at Fletcher only a few months. He had recently sold his elevator at that place to Messrs. Coppock & Patty.

John O. Goodrich died April 26 at Brooklyn, N. Y. He had been engaged in the grain and hay business for over forty years. In 1857 his father opened a store at the corner of Stagg Street and Union Avenue, Brooklyn, and for forty-two years the firm of E. B. Goodrich & Son has been known and respected in that city. The deceased leaves a wife and four children.

Harvey Archer died very suddenly at Richmond, Va., April 20, in his forty-fifth year. He was a native of Richmond, Va., and for a number of years was a member of the firm of Baylor, Archer & Lynn, grain and feed dealers of Richmond. He withdrew from that firm about two years ago and since then had not been actively engaged in any business. He never married.

Edward William Barker died at his home in Philadelphia, Pa., April 23, aged 64 years. Mr. Barker was a native of Baltimore and had been a resident of Philadelphia since 1879, in which year he became a partner in the firm of Gill & Fisher, grain exporters, of that city. He was a member of the Commercial Exchange and one of the founders of the Maritime Exchange. He was also a member of the Executive Council of the Philadelphia Board of Trade.

William P. Brown, president of the Brown Commission Company, of Minneapolis, died of pneumonia May 6, aged 70 years. The deceased was born at Avon, N. Y. In 1845 he moved to Flint, Mich., and in 1855 settled in Red Wing, Minn., where he engaged in the elevator and milling business with ex-Governor Hubbard of Minnesota. In 1885 he removed to Minneapolis and entered the grain business. He leaves a wife and two sons, Wm. P. Brown, Jr. and Edward L. Brown, both residents of Minneapolis.

Nathaniel T. Wright, a member of the Board of Trade firm of Nash, Wright & Co., died May 10, at his home in Chicago. Mr. Wright was born in Rome, N. Y., 65 years ago and was brought West with his parents while an infant. The family settled in Lisbon, Ill. In 1859 Mr. Wright came to Chicago and engaged in the commission business with Mr. Beebe, under the firm name of Wright & Beebe. In 1879 the present firm of Nash, Wright & Co. was formed. For forty years Mr. Wright was absent hardly a single day from the floor of the

exchange. He leaves a widow, a son, Robert T. Wright, and a daughter, Ida F. Wright.

John H. Clough died at his residence in Chicago April 24, aged 70 years. Mr. Clough was born at Redfield, Me., and came to Chicago in 1855, while a young man. He engaged in the packing business and was a charter member of the Board of Trade. He served as State Senator for two terms and was a county commissioner at the time the county building was erected.

Augustin C. Buell died in Sicily April 22, while on a trip around the world with his wife and daughter. Mr. Buell was a member of the Buell Grain Company, of the Chicago Board of Trade, and had been active on the Board for twenty years or more. Of late years he had traveled widely in Europe and America. Besides his wife and daughter, he leaves a brother, Isaac Buell, of Berlin, Wis.

J. B. Guenzius died at his home in La Crosse, Wis., April 14. He was familiarly known as Barney Guenzius, and as a wheat buyer was personally acquainted with nearly every farmer in the vicinity of La Crosse, having been in the business in that locality for thirty-five years. He was in his seventy-second year at the time of his death. He was in the employ of the W. W. Cargill Company, and had charge of their elevator system. He leaves a wife and one son, Walter B. Guenzius, who has charge of the Cargill interests at Green Bay.

## SOME POINTERS ON CORN.

Do you know how many varieties of corn there are? In Bulletin No. 57 of the United States Department of Agriculture 508 varieties are enumerated, and these are divided into six groups:

(1) The "pod corns" are peculiar in having each grain on the cob inclosed in a husk of its own. The whole ear is also surrounded by husks. Darwin thought that possibly this was the earliest type of maize, from which all others are descended. Other naturalists regard it as a freak. This variety tends to produce much foliage, and would make a valuable forage plant.

(2) There are twenty-five varieties of "pop-corn." In these the starch is very compact in small horny grains. When heated to a high temperature the moisture in the horn, like starch, expands and explodes the grain, turning it inside out.

(3) The "flint corns" are mostly eight-rowed. There are sixty-nine kinds. Many of them mature in ninety-five to one hundred days. They are suitable for cold climates, and are grown in the Northern states and Canada, even as far north as 54 degrees latitude.

(4) The most extensively grown varieties are the "dent corns," numbering 323 varieties. They take their name from the indentation or "dent" which appears at the end of the grain on ripening. The color is mostly yellow and white, sometimes red and black.

(5) The "soft corns" are so-called because they are entirely free from the compact, horn-like texture of the previous varieties and the starch is all of a white floury nature like the softer part toward the tip of a grain of dent corn. This was grown by the Indians in both North and South America. There are twenty-seven varieties, the best known, perhaps, being the "Blue Squaw" corn.

(6) The "sweet corns" are mostly grown in the Northern states, as they do better there than in the South. The kernels wrinkle much on drying. Sixty-three varieties are recognized and mostly grown to be eaten green and for canning.

Corn varies in height from eighteen inches for "Golden Tom Thumb" to thirty feet for some varieties grown in the West India islands. Tennessee appears to hold the record for the tallest corn ever grown in the United States—twenty-two and a half feet.

The rows on an ear may vary from four to forty-eight, depending on the variety mostly. Ears vary in length from one inch for varieties of pop-corn to sixteen inches for dent. The weight varies between forty-six grains for 100 kernels of "miniature pop," to 1,531 grains for 100 kernels of "Cuzco" soft.

A variety is grown in Paraguay which ripens in a month from planting; there are other varieties grown in southern countries which require seven months.—E. B. Knerr of Midland College in Atchison Globe.

During the present year Baltimore has retained her supremacy as an exporter of corn, her nearest competitor being Philadelphia, which is more than three million bushels behind for the four months of 1900, with New York six million bushels behind. Baltimore holds second place as an export point for flour, and fifth place for wheat, being surpassed by New York, Boston, Galveston and New Orleans. The grain dealers of Baltimore have not been encouraged by the grain trade of the present year, and are at a loss to know the real causes of the dullness.

## Items from Abroad

The Lincolnshire Chamber of Agriculture has again declared for a bounty to growers of British wheat.

Sweden is suffering from a scarcity of oats and hay. Even straw sells at the phenomenal price of 1 cent a pound.

The Austrian government has established elevators where the small cultivator can store his crops and secure loans upon them.

A new tariff has been proposed for Dutch Guiana, to go into effect on proclamation of the governor. Hay, corn meal and bran are put on the free list.

Grain dealers at Marseilles have petitioned the minister of commerce against the increase of the duty on American corn, as proposed by the agrarian party.

Waller & Co. of Braila, by their own ships and barges, delivered within twenty days, 800 cars of barley to the Russian government. It was distributed as seed to South of Russia farmers.

The Australian colonies anticipate a large increase of trade in wheat, flour and all sorts of provisions in South Africa, as a result of the unsettled agricultural conditions growing out of the war.

Canada's production of 64,000,000 bushels of wheat in 1899 ranked her as eleventh in the list of wheat producing countries, standing between the United Kingdom and the Australian colonies.

The president of the board of agriculture has appointed a committee to report measures for the improvement of methods for collecting and recording grain and other agricultural product prices in Scotland.

R. W. Paul's grain store at Ipswich, England, was burned April 15, causing a loss of \$100,000. The building, previously a malt house, was 300x60 feet in size, three stories high. It contained wheat and barley.

New deep water moorings are to be provided for the harbor of Ipswich, England, in order to do away with the lightering of grain at low tide. The new moorings will give berth water to the largest grain vessels at all stages of the tide.

In a speech in the French senate, M. Dupuy, minister of agriculture, in April, said that so much damage has been done to the winter wheat that it is certain the national wheat crop of 1900 will be below the national requirements.

Australia has a large available surplus of wheat, but apparently it is being diverted to South Africa rather than to England. Up to April 10, only 173,000 bushels had been received in London of the crop last harvested, compared with 1,000,000 bushels same period a year ago.

The transfer elevators of the London Grain Elevator Company, Ltd., at Tilbury Docks, described in the "American Elevator and Grain Trade" for March, 1900, were formally inspected on April 24. The inspection consisted of the usual function, luncheon, speeches, etc.

The annual meeting of the Liverpool Corn Trade Association was held on April 25. The membership is now 368, representing 235 firms, while 393 persons are entitled to admission to the newsroom of the Association. The collection in dock taxes and town dues for the year equaled \$630,000.

It is noted that, for the first time on record, the English imports of wheat from the Argentine for March, 1900, exceeded those from another country. They amounted to 2,720,000 bushels, while the quantity from American Atlantic ports was only 2,448,000 bushels, and from all other sources 2,264,000 bushels.

The Argentine minister of agriculture has granted a concession to Lenhardtson, Mitán & Grether to construct and work grain elevators and dryers in the port of Buenos Aires at the North Basin. The elevators are free from taxation until 1910, and all the machinery can be imported duty free. The concession is for forty years.

A British consular report from Japan says that with the advance of Japanese manufactures, agriculture is declining in that country, the yield of agricultural produce being at a standstill. The import of beans, etc., in 1899 increased over 1898, but that of flour decreased 44,000 sacks. The exports of rice (2,590,000 cwt.) were double those of 1898, but those of flour (3,000) were only 3-16 of those of 1898.

A remarkable feature of Australian agriculture has been the increase of wheat acreage in the last thirty years. In 1899 there were in the colonies 5,867,054 acres in wheat, producing 41,421,853 bushels, compared with a production of 25,641,325 bushels in 1891 and only 11,927,134 bushels in 1871. When irrigation methods in New South Wales are perfected, the wheat production will be still further enlarged.



## COMMISSION

Wm. P. Brown, of the Brown Commission Co., Minneapolis, died recently.

Hanson & Helgeson, grain merchants of Ogden, Utah, have dissolved partnership.

C. A. King & Co. of Toledo, Ohio, have secured a membership in the Chicago Board of Trade.

Davis & Andrews succeed the Moulton-Davis Company in the grain commission business at Memphis, Tenn.

W. S. Earnest & Son, commission grain merchants of Dundee, N. Y., are reported out of business at that place.

George W. Lowrey now represents Daniel P. Byrne & Co. of St. Louis, in Nebraska, with headquarters at Lincoln.

Arthur R. Jones & Co. removed on May 1 from the old offices in the Rialto Building, Chicago, to new quarters at 226-228 La Salle Street.

Martin & Slack of Webster City, Ia., succeed W. T. Carpenter in the commission grain business at Mason City, Ia., and will fit up new offices.

The Northwestern Grain Co. has rented the quarters at Mason City, Ia., formerly occupied by W. T. Carpenter, who has given up the business.

The Federal Stock and Grain Company has been incorporated at Boston with a capital stock of \$100,000, by Charles R. and James C. Burger and others.

John L. Rogers, a grain merchant of Baltimore, Md., has filed a voluntary petition in bankruptcy, placing his liabilities at \$34,337.54, and assets at \$770.

Minnesota commission firms have been compelled by the Grindeland law to file bonds and secure licenses from the State Railroad and Warehouse Commission.

Arthur R. Jones & Co. of Chicago have opened an office for commission stocks, grain and provisions in Duluth, with private wire to Chicago. R. B. Evans is in charge.

F. J. Taylor Jr., who has been the Southwestern Iowa representative of Daniel P. Byrne & Co. of St. Louis, with headquarters at Creston, Ia., is no longer connected with that firm.

C. H. Kent and Joseph Copp, who have been in the grain business in Detroit for many years, have opened a private wire brokerage office in that city under the firm name of Kent, Copp & Co.

E. W. Bailey, head of the commission firm of E. W. Bailey & Co., Chicago, Ill., returned the first part of May from a business and pleasure trip to New York state and his old home at Montpelier, Vt.

C. A. Burks & Co. of Decatur, Ill., have opened a grain and commission office at 726 Chamber of Commerce, Detroit, Mich. Their Decatur office will be continued by them for the track buying and shipping business as heretofore.

Thomas G. Hewlett, whose former offices in the stock and grain brokerage business at Birmingham, Ala., were burned out recently, has moved into new and commodious offices. J. C. Cullens of New Orleans is Mr. Hewlett's manager.

Milton Rathbun, whose main office is at 453 Fourth Avenue, New York, has worked up a wholesale and commission business in hay, straw, grain, feed, etc., until it is now doubtless one of the largest businesses of the kind in New York City. He employs regularly twelve trucks.

F. G. Logan of Chicago is said to have offered to pay \$3,000, or 37 cents on the dollar, to settle Clapp & Culver's liabilities in Marinette, Wis. Clapp & Culver were doing a brokerage business in Marinette until a few weeks ago, when they failed. It was understood that F. G. Logan was backing the firm. Messrs. Clapp and Culver were arrested for alleged embezzlement, but the prosecution will probably be dropped in view of a settlement.

That portion of the new Board of Trade commission rule which requires that in c. i. f. transactions the closing of the hedges must be on the same day as the cash sales if only one commission is to be charged, has been subjected to harsh criticism. Commission houses claim that seaboard houses will give their hedges to the elevator people, in order that the whole transaction may go together and a double commission be avoided. They say, too, that the elevator men do not seek the business.

The second number of "Grain Trade Talks" has appeared from the pen of Edward G. Heeman, manager of the receiving department of Ware & Leland, Chicago. The subject treated is the "Commission Man's Remuneration," and is a strong defense of the commission rule as established by the Chicago Board of Trade. The booklet also gives extracts from the new commission rules of the Chicago Board of Trade, that went into effect March 13, and

like its predecessor, Talks No. 1, it will be mailed free on application and is well worth reading.

Wm. D. Shimp and Cyrus B. Millen, both of whom are well known in Northern Indiana, have formed a partnership as wholesale commission merchants and dealers in grain and feed, coal and wood, baled hay and straw. They have bought out the business of E. U. Finch at South Bend, Ind., and will enlarge its facilities.

One of the handsomest hangers often seen in a grain elevator is that sent out this spring by E. S. Woodworth & Co., Minneapolis. It represents the face of the Norwegian Princess Zolo, handsomely framed in an artistic setting. Whether the Princess is to blame or not, the receiving and shipping department of the business has been very busy this spring. Mr. Woodworth is a member of the Chicago Board of Trade and the firm's clearing and shipping houses and ample storage room enable it to take the best care of all business entrusted to it.

## CANADIAN NORTHWEST GRAIN STORAGE CAPACITY.

Following is the elevator and grain storage capacity in Manitoba and the Northwest Territories, including Port Arthur, Port William and Keewatin:

Canadian Pacific Ry.....	17,243,000 bush.
Northern Pacific Ry.....	1,641,000 bush.
Manitoba & Northwestern Ry.....	1,302,500 bush.
Great Northwest Central Ry.....	492,000 bush.
Canadian Northern Ry.....	230,000 bush.
Manitoba & Southeastern Ry.....	40,000 bush.
Total .....	20,908,000

The largest elevators are those of the C. P. R. Co. at Port William, viz., A, B, and D, 1,250,000 bushels each, and C, 1,500,000 bushels; Lake of the Woods Milling Company, Keewatin, 750,000 bushels; Ogilvie Milling Company, Winnipeg, 320,000 bushels; C. P. R., Port Arthur, 315,000 bushels; Northern Elevator Company, Winnipeg, 140,000 bushels; Alexander, Kelly & Co., Brandon, 125,000 bushels; Farmers' Elevator Company, Portage la Prairie, 110,000 bushels.

The following figures, showing the storage capacity on January 1 of each year since 1891, shows its rapid growth:

1891 .....	7,628,000 bush.
1892 .....	10,366,800 bush.
1893 .....	11,467,100 bush.
1894 .....	11,817,100 bush.
1895 .....	12,000,000 bush.
1896 .....	13,873,600 bush.
1897 .....	14,999,300 bush.
1898 .....	18,378,500 bush.
1899 .....	19,958,000 bush.
1900 .....	20,908,000 bush.

The daily capacity of the flour mills in Manitoba and the Territories is 10,230 barrels, and of the oatmeal mills 750 barrels.

The following table shows the Manitoba wheat export, including flour, the export of the Territories being included during the last years:

Crop 1886 .....	4,000,000 bush.
Crop 1887 .....	10,500,000 bush.
Crop 1888 .....	4,000,000 bush.
Crop 1889 .....	4,500,000 bush.
Crop 1890 .....	11,500,000 bush.
Crop 1891 .....	14,000,000 bush.
Crop 1892 .....	14,000,000 bush.
Crop 1893 .....	12,000,000 bush.
Crop 1894 .....	15,000,000 bush.
Crop 1895 .....	29,000,000 bush.
Crop 1896 .....	14,000,000 bush.
Crop 1897 .....	22,000,000 bush.
Crop 1898 .....	23,000,000 bush.
Crop 1899 .....	35,000,000 bush.

—Railway and Shipping World.

## KAFFIR CORN.

Two varieties of Kaffir corn are grown extensively in this country. In Kansas it is grown in every county and the crop in that state alone for 1899 was reported as 582,895 acres. It is said to be one of the most satisfactory of crops for a dry region.

Two varieties of Kaffir are recommended by the Kansas Experiment Station, the Red and the Black-hulled White. On the college farm the Red has given an average yield of 37 bushels per acre, and the Black-hulled White 43 bushels. In Western Kansas many farmers think the Red is hardier in a drouth. The average yield of grain per acre on the college farm for the past eleven years has been, per year: Kaffir corn, 46 bushels; Indian corn, 34½ bushels. The highest yield per acre in one year was: Kaffir corn, 98 bushels; corn, 74 bushels. In the western half of the state the difference in favor of Kaffir corn is greater, as there, in dry years, when corn yields one to five bushels per acre, the yield of Kaffir corn is 25 bushels or more.

The seed of Kaffir corn is very small but weighs

56 pounds to the bushel. The seed of both the Red and White varieties makes good meal for bread and cereal products, and the whole grain is splendid feed for poultry. When cracked and fed with other foods the Kaffir corn possesses valuable fattening qualities for horses and hogs. Analyses show that the seed is similar to corn except that it is not so rich in proportion.

## TRANSPORTATION

The Straits opened on April 18.

The C. & E. I. is surveying a road from Converse to Muncie, Ind.

A new road is under survey from Richman to Cottage Grove, Ind.

The C., R. I. & P. Ry. is building the line from Kingfisher to Guthrie, Okla.

The N. P. has let the contract for 73 miles of road from Castleton to Dickey, N. D.

Grading on the Illinois Central's Albert Lea & Southwestern line to Lyle has begun.

The C. & N. W. has let a contract for 25 miles of road from Lost Creek, Iowa, to the coal fields.

A new railroad from Sapulpa to Oklahoma City now gives Oklahoma a direct line to St. Louis.

The C., M. & St. P. has let contracts for the extension of its Fox Lake line to Janesville, Wis.

Track laying has begun on 20 miles of road for the C., R. I. & P. Ry. from Mountain View, Okla., westward.

Navigation at Chicago opened on April 21, when twenty-two vessels carrying 6,536,807 bushels of grain started for Lake Erie.

From the opening of lake navigation to May 7, 766,000 bushels of corn were sent forward by lake from Toledo, mostly to Canada.

A new grain route is talked of through Wisconsin. The plan is to build a road 100 miles long uniting the "Soo" and Green Bay & Western roads, building terminal grain elevators at Green Bay.

Wheat shipments from Duluth for the week ending May 4 aggregated more than 4,000,000 bushels. A rush was occasioned by the effort to move as much grain as possible before ore shipments began.

The railroads of Southwestern Minnesota have made a new schedule of rates on flax, wheat and coarse grains to Minneapolis and St. Paul, which are from one-half cent to three cents lower than formerly obtained, the average reduction being one cent.

The Central Transportation Company of Buffalo, N. Y., has been incorporated with a capital of \$6,000 to carry on the business of receiving and contracting for the carrying of grain, lumber, etc. The directors are: O. A. Crandall, Harris Fosbinder and W. C. Jacus of Buffalo.

Capt. Alex McDougall is now building the three steel vessels with which he is to inaugurate the new Mississippi river grain route. He has 150 men at work at St. Louis, with machinery brought from the shipbuilding plant at West Superior. Each of the three vessels has a capacity of about 3,000 tons. One is a steamer of the propeller type, which is to be equipped with twin screws and engines developing about 1,800 horse power, and the other two are barges. Others of similar type will be built, until there is a full line. The plan is to carry grain from St. Louis to New Orleans, where it can be transhipped direct to ocean-going vessels.

The Canada National Railway and Transport Company incorporated in Canada, proposes to build another Duluth-Montreal route, via Collingwood, Toronto and the St. Lawrence river. With the exception of ninety-five miles between Collingwood and Toronto the transportation service will devolve upon steamers and barges. The rail connecting link which it is proposed to build between Collingwood and Toronto will be an air line. The claim is made that the new company will have the shortest route between points on the great lakes and Montreal, with a minimum of rail and a maximum of water haul. The route proposed will avoid the Welland canal and the long haul through St. Clair and Detroit rivers and Lake Erie. The incorporators of the company are John Wilson, Fred. T. Hodgson and David Wilson of Collingwood, J. G. Keith of Chicago, Frederick Kraus of Milwaukee, G. G. Barnum and William Buchanan of Duluth, G. F. Piper of Minneapolis, George H. Breyman of Toledo, R. C. Stewart, John H. Boyle and J. B. McCall of Toronto, W. J. Hill of Deer Park, Ont., and G. P. Graham of Brockville, Ont. The capital stock is fixed at \$5,000,000 and the company headquarters are to be located in Toronto.

The Chicago Board of Trade raised a relief fund of about \$4,000 for the Canadian fire sufferers.



# BARLEY AND MALT

Nagel Bros. of Bushnell, Ill., have bought from the Barnard & Leas Manufacturing Company one No. 12 Cyclone Tubular Barley Cleaner.

The Texas Brewing Company of Fort Worth, Texas, has bought from the Barnard & Leas Manufacturing Company one Eureka Bran Packer.

The David Mayer Brewing Co. of New York City has recently bought of the Barnard & Leas Manufacturing Company one Hercules Bran Packer.

W. W. Cargill & Co. of Green Bay, Wis., have bought from the Barnard & Leas Manufacturing Company one 60-Cylinder Tubular Barley Separator.

The Pabst Brewing Company has put into the Wisconsin Mill Company's grain elevator at Milwaukee a 70-horse power gas engine. This is said to be the largest gas engine ever installed in Milwaukee.

While the official report shows that there is not a bushel of barley in store in Chicago, yet the fact is there were 380,000 bushels or more in private elevators when the report was made public. The official report may be correct, but it is misleading.

The Wisconsin Malt and Grain Company is building an addition to its malt house at Appleton, Wis. The malting system to be used is the new Saladin-Prinz Pneumatic System. The plant will be ready for next season's malting, and will cost about \$100,000.

To rid a malt house of weevil, whitewash the walls with hot lime to which has been added carbolic acid or chloride of lime. Repeat the dose frequently. Malt houses should always be whitewashed at the end of every malting season. Weevil will not remain where lime is used freely. The first indication of this pest is the presence of holes in the grain near the acrospire. Examine the grain carefully.

The receipts of barley at Cincinnati for the month of April, 1900, were 86,031 bushels, and the shipments were 2,334 bushels, as compared with receipts of 37,837 bushels and shipments of 1,624 bushels in April, 1899. The receipts of malt at Cincinnati during April, 1900, were \$3,848 bushels, and shipments 87,818 bushels, as compared with receipts of 84,703 bushels and shipments of 79,503 bushels in the same month last year.

It is doubtful whether any handler of barley could find a more practical way of practicing economy than by adopting the Invincible Needle Screen Gravity Barley and Malt Separator. All separations are effected without the use of power, and the grade of barley raised to a brewing standard by removing black oats, light kernels, chaff and other seeds. A cut and list of users of this machine appears in the Invincible Grain Cleaner Company's advertisement on the II cover page of this number.

Shipments of barley from San Francisco during March were 175,216 centals, valued at \$151,765. Nearly five-sixths of this amount went to Great Britain and over one-sixth to the Hawaiian Islands, this being about the proportion of the shipments of the year. For the nine months, July to March inclusive, during which nearly all the exports of barley are made, there were shipped from San Francisco 3,324,909 centals of barley, valued at \$3,229,900. Owners of barley at San Francisco who found themselves overstocked with the grain at the close of the season, and not being able to sell it to the regular shippers, chartered a large ship for a full cargo to Europe.

H. J. O'Neill, the quondam barley king, has been brought into prominence again by a decision in a Minnesota court involving a controversy over the stock held by Mr. O'Neill in the H. J. O'Neill Grain Company. Two western banks with claims against O'Neill personally attached his stock in the H. J. O'Neill Grain Co. The company in return claimed a prior lien on the stock under the Minnesota law, for the reason that O'Neill was indebted to the corporation, of which he had been the president, to the extent of \$70,000. The court dismissed the suit of the banks and held that the company under the law did have a prior lien to the extent of the \$70,000 and authorized it to sell the stock for such indebtedness.

## PNEUMATIC MALTING.

In a recent article on the production of green malt by the pneumatic process a German contemporary says that in order to get a really good malt by this method it is highly necessary that the barley should be carefully chosen in the first instance, freed from dirt, etc., and then steeped, using a little lime. The grain must not be completely sodden with water if good results are to be obtained. Usually

from thirty-four to forty-eight hours in the steeping vats is a sufficiently long period. In the first stage of the process, the barley, heaped to seventy to seventy-five centimeters high, is opened up to the air once or twice, and moistened with a little water. On the second day the second part of the process is carried out, the barley being shifted. During this second day exposure to the air takes place three times, and the grain is turned over. At this stage the temperature should not exceed 10 degrees to 11 degrees R. On the third day the third part of the process commences, and the grain is exposed to the air three or four times, moistened, and the usual operations performed. On the fourth day the grain is again turned over, but is only moistened if its condition demands it. The temperature should not be higher than 13 degrees R. After the seventh day, if the instructions have been carefully followed, the resultant product will be found to be good.

## BARLEY AS FEED.

The following table gives the composition of barley, compared with oats and dent corn, the standard feed of America:

	Dry Matter in 100 lb.	Digestible Nutrients in 100 lb.			
		Protein.	Carbohydrates.	Fat.	Total Digestible.
Barley .....	Lb. 89.1	Lb. 8.7	Lb. 65.6	Lb. 1.6	Lb. 75.9
Oats .....	89.0	9.2	47.3	4.2	60.7
Corn .....	89.4	9.8	66.7	4.3	70.8

It will be seen that the total digestible nutrients in 100 pounds of barley exceed those in 100 pounds of oats by more than fifteen pounds. There are also wide variations in the composition of the two grains, making their values for feeds depend largely upon the nature and demands of the animals to be fed and the purposes for which they are to be fed. . . . Considering the components of the digestible portions of barley, it will be seen that the protein—which is 8.7 pounds per 100—is a little above the 8 pounds required in 100 pounds of horse feed and is below the requirements for each of the other animals named. The carbohydrates of barley are 65.6 pounds per 100, being above the requirements for every animal except swine. The fat in barley is low, but carbohydrates perform much the same function as the fats and are readily converted into fat in the animal economy, so that the low percentage of fat in barley is not necessarily a serious objection. . . . Barley is easily balanced as a ration for the horse, by the addition of hay or fodder. These bring down the proportion of digestible constituents by adding "roughage." If the hay be alfalfa, which is rich in protein, the ration of barley and alfalfa may be made nearly as ideal as oats for the horse. Barley and alfalfa may be made almost ideal for the cow. If alfalfa is not at hand, prairie hay and wheat bran may be fed with barley to both horses and cows. Barley and prairie hay make good feed for both horses and cows, but bran is needed with them to make the ration as perfect as one of oats. Barley is suitable for fattening steers, and, if bran or oil meal be added to bring up the protein, fattening steers should do well on barley—better than on oats, and better than on corn unless a good deal of some feed rich in protein be added to the corn. It has been seen that swine require very concentrated feed. Barley is, in this respect, better than oats for swine. Swine require feed rich in protein. In this respect barley is better than corn. Barley is a more fattening feed than oats, a less fattening feed than corn, a feed that may well be used largely if it can be produced cheaply.—Extracts from an article in the Kansas Farmer.

## INSECTS AND STORED GRAIN.

The depredations of insects that attack stored grain may be almost wholly prevented, and without much trouble. If bins have had infested grain in them, certainly they should not be used for new grain until they have been thoroughly cleaned, and it is a very excellent practice to clean a bin anyhow, before new grain is put into it.

But the sovereign remedy for this class of insects is bisulphide of carbon. This is a colorless liquid with a very disagreeable odor, and is a powerful poison. It is very inflammable and must be kept away from fire. At ordinary temperatures, it vaporizes, and being heavier than air, descends into the grain and will kill anything in it that is alive.

The manner of applying it is to pour it into shallow dishes, and set them on the surface of the grain. From a pound to a pound and a half may be used for tight bins, but open bins and cribs will require a larger quantity. The grain may be exposed to the treatment for twenty-four hours, or even longer, without injuring it for milling purposes, and without destroying its power of germination. If buildings are badly infested, it is well to repeat the treatment, in warm weather, in about six weeks. Bisulphide of carbon is not expensive. If bought at wholesale, the cost of treating a ton of

grain would not be over 20 cents at most.—Epitomist.

## IMPORTS OF GRAIN AND HAY.

Statistics compiled by the United States Department of Agriculture, covering imports of grains for the past five years, show that a very large percentage of the imports of barley, oats, rye, wheat, and beans and peas come from Canada. The largest outside source of supply of corn is Mexico. A little less than one-third of the flax imported comes from the United Kingdom, as does also a little more than one-half our imported barley malt. China, Germany and Japan vie with one another in the matter of exports of rice to the United States. Of hay, practically all our imports come from Canada. The following table gives the average imports for five years of the grains named:

	Per Cent.	Bushels.	Values.
Canada .....	97.74	1,005,166	\$390,661
Russia .....	2.08	21,365	4,502
All other countries ..	.18	1,839	1,298
Totals .....	100.	1,028,370	\$396,461

OATS.			
	Per Cent.	Bushels.	Values.
Canada .....	97.89	82,171	\$21,499
United Kingdom ..	2.06	1,732	1,135
All other countries ..	.05	40	27
Totals .....	100.	83,943	\$22,661

RYE.			
	Per Cent.	Bushels.	Values.
Canada .....	98.30	9,069	\$3,602
Germany .....	1.37	126	372
All other countries ..	.33	31	45
Totals .....	100.	9,226	\$4,019

WHEAT.			
	Per Cent.	Bushels.	Values.
Canada .....	99.90	1,658,770	\$1,227,513
Germany .....	.04	629	1,577
Mexico .....	.03	506	269
All other countries ..	.03	453	427
Totals .....	100.	1,660,358	\$1,229,786

BEANS AND PEAS.			
	Per Cent.	Bushels.	Values.
Canada .....	57.52	457,931	\$501,928
Austria-Hungary ..	26.17	208,332	165,055
All other countries ..	16.31	129,814	125,728
Totals .....	100.	796,077	\$792,711

CORN.			
	Per Cent.	Bushels.	Values.
Mexico .....	72.51	4,759	\$2,202
Canada .....	27.17	1,783	676
All other countries ..	.32	21	19
Totals .....	100.	6,563	\$2,897

FLAX.			
	Per Cent.	Bushels.	Values.
United Kingdom ..	29.74	2,030	\$760,775
Canada .....	23.23	1,586	251,720
Russia .....	21.06	1,438	233,591
All other countries ..	25.97	1,773	412,341
Totals .....	100.	6,827	\$1,658,427

MALT.			
	Per Cent.	Bushels.	Values.
United Kingdom ..	52.39	3,930	3,355
Germany .....	27.42	2,057	2,096
Canada .....	18.90	1,418	782
All other countries ..	1.29	97	115
Totals .....	100.	7,502	\$6,348

RICE.			
	Per Cent.	Pounds.	Values.
China .....	28.12	32,058,469	\$454,792
Germany .....	25.73	29,334,459	575,676
Japan .....	22.03	25,111,678	432,760
All other countries ..	24.12	27,505,962	640,494
Totals .....	100.	114,010,568	\$2,103,722

HAY.			
	Per Cent.	Tons.	Values.
Canada .....	99.98	143,008	\$1,206,657
All other countries ..	.02	25	212
Totals .....	100.	143,033	\$1,206,869

The broom corn trust, which is responsible for the high prices in that staple, is said to have 12,000 tons on hand for which \$200 a ton, or \$2,400,000, is asked. Dealers outside the trust have been selling at \$180 to \$190, and have imported 500 tons of Hungarian corn at a cost of about \$120 per ton. This is an inferior article, yellow instead of green, and is grown in Hungary largely for seed.



## PERSONAL

J. H. Ruggles is now a grain buyer at Nugent, Iowa.

D. J. Nally is now in charge of Cargill Bros' elevator at Portage, Wis.

Samuel Staples is in charge of the Monarch Elevator at Little Falls, Minn.

R. E. Johnson informs us that he has removed from Orient, Iowa, to Menlo, Iowa.

Jens Olafson, wheat buyer at the roller mills in Madelia, Minn., has removed to Minneapolis.

L. C. Horn has been appointed State Grain Weigher at Wellington, Mo., to succeed Jacob Stetler, resigned.

Hugh Thompson is talked of as a candidate for railroad and warehouse commissioner in Minnesota on the Republican ticket.

Wallace Armstrong, one of the directors of the W. R. Mumford Co., Chicago, has been elected assistant secretary of the company.

F. H. Peavey is said to have taken out a life insurance policy recently for \$1,000,000, the annual premium on which is about \$48,000.

Harry C. Avery, who has been associated with Counselman & Day at their New York house for a number of years, has left their employ.

Oscar Casey recently purchased H. P. Jensen's elevator at Dysart, Iowa. Charles Holtz will remain as bookkeeper and Henry Heckt as engineer.

George B. Torney, grain buyer for the Northern Elevator Co. of Solgirth, Man., has been appointed local agent for the Dominion Express Company.

J. R. Arnold, who has been manager for the Middle Division Elevator Co. at Parnell, Ill., for the past year, is now at Cropsey, Ill., for the same company.

John Ostdeik has resigned his position as representative of the Kansas City Grain Co. at Portsmouth, Iowa, and has returned to his home in Neola.

Charles L. Reynolds, of the grain firm of Reynolds Bros., Toledo, will not remove to Chicago, as reported, but is building a handsome residence in Toledo.

Oscar K. Lyle, who has been connected with the firm of MacIntyre & Wardwell, New York, as statistician, is about to sever his connection with that firm.

Joe Herrington, of Sedalia, Mo., is a candidate for railroad and warehouse commissioner in Missouri on the Democratic ticket. He is a railroad conductor.

Alex McKinnon, who has been with his brother, P. McKinnon, in the grain business at Schaller, Ia., has left that place to take charge of an elevator in Cushing, Ia.

J. C. Austin, formerly with the Samuel Born Co., at Lafayette, Ind., is now in charge of the new office of the Lafayette Elevator and Mill Company in that city.

Avery Ingersoll, who was formerly city passenger agent for the Chicago, Milwaukee & St. Paul Railway in Milwaukee, is now in the grain business at Tacoma, Wash.

H. S. Grimes of Portsmouth, Ohio, who is well known in the grain trade beyond the borders of his own state, holds the office of treasurer of the Ohio State Board of Agriculture.

George E. Fuller, who has had charge of the shipping department of the Peavey Elevator Company, is now with Alexander Geddes & Co., Chicago, in the same capacity.

David C. Fisher, a grain dealer at Ransom, Ill., was acquitted after a five days' trial at Ottawa, Ill., on a charge of embezzling \$2,500 from Carrington, Hannah & Co. of Chicago.

George B. Dewey, formerly traveling representative for Milmine, Bodman & Co., Chicago, has accepted a position to travel in the interests of the Calumet Grain & Elevator Co.

H. Sykes, who has been with the Atlas Elevator Co. at Lake Benton, Minn., is now with the Milwaukee Harvester Co. Mr. Bonday of Tracy is his successor with the Atlas Elevator Co.

Wm. P. Barnett, senior member of the firm of W. & R. Barnett, grain merchants, of Belfast, Ireland, has been visiting the grain centers of this country, arranging for shipments to his firm.

Philip D. Armour expects to sail for Europe May 18, and will go directly to the baths at Nauheim, Germany, where he will remain for rest and recuperation until September. He will be accompanied by no other persons than Dr. J. L. Miller,

his physician, and John Kerr, his private secretary. Mr. Armour is reported as saying that he feels as well as he ever did.

Alex. G. McBean, of Alex. G. McBean & Co., grain and produce merchants, Montreal, Canada, has been appointed to act for Professor Robertson, dairy commissioner, during the latter's absence in Europe.

Frank Lambertson is now at Beresford, S. D., where he has charge of the grain business of his firm. Ed. Lambertson, who has been at Alcester, S. D., is now in charge of the business of the firm at Hawarden, Iowa.

I. M. Gillett, who has been with Jurz & Borms in the grain business at Spencer, Ill., for a long time, has gone west, and will locate in the state of Washington. Louis Feil succeeds him as agent for Jurz & Borms at Spencer.

W. L. Barnum, president of the Millers' National Insurance Co., Chicago, returned May 1 from his annual vacation greatly invigorated from his two months' outing. His time was mostly spent, while away, on the east coast of Florida.

John J. Hyland, traffic manager of the Board of Trade freight business, has been deposed from his office and the department has been abolished. Receivers and shippers speak in the highest terms of Mr. Hyland's work and deprecate this move.

B. L. Simonds, who has been superintendent of Nye, Jenks & Co.'s elevator at Washburn, Wis., has been appointed superintendent of the new Omaha Elevator at Allouez Bay, also, which will be operated by Nye, Jenks & Co. His headquarters will be at Duluth.

Otto Fahnestock, manager for Preston, Fahnestock & Co., grain merchants, at Osgood, Iowa, with his sister will spend several months in Europe this summer. Leaving with a party of forty in June, they will tour the Continent and British Isles and visit the Paris Exposition, and return in August.

F. G. Adamson, secretary of the John S. Metcalf Co. of Chicago, has just returned to the office after a short spell of illness. In order to fully recuperate he contemplates taking a trip through Virginia and the Southeast. He will take his golf sticks and demonstrate to the first families of Virginia how the game is played.

W. R. Mumford, of the Chicago Board of Trade, for twenty-six years has been treasurer of the Fulton Street M. E. Church, but has resigned by reason of having bought a home in Evanston. At a farewell reception recently held in the church parlors, Mr. Mumford's many friends presented him with a handsome gold watch, suitably engraved, as a mark of their appreciation.

## OUR CALLERS

We have received calls from the following gentlemen prominently connected with the grain and elevator interests, during the month:

G. M. Sloan, Pekin, Ill.  
Julian Doriot, Bluffton, Ohio.  
Fred L. Williamson, of Williamson, Wickstrum & Co., Clay Center, Kan.  
L. I. Ziegler, representing Nordyke & Marmon Company, Indianapolis, Ind.  
F. L. Cranson, secretary Huntley Manufacturing Company, Silver Creek, N. Y.  
B. S. Tyler of Decatur, Ill., secretary of the Illinois Grain Dealers' Association.  
A. F. Shuler, Minneapolis, Minn., representing Huntley Mfg. Co., Minneapolis, Minn.  
L. S. Meeker, Minneapolis, Minn., representing Richmond Manufacturing Company, Lockport, N. Y.  
William Ebert, Louisville, Ky., representing Barnard & Leas Manufacturing Company, Moline, Ill.

## OATS FOR FEEDING.

Oats for feeding should have an agreeable smell, clean, smooth and bright appearance and pleasant taste, should feel dry, hard and elastic to the touch and when broken between the teeth, and should be fairly well supplied with flour. The fact that they fulfil these conditions will show that they have been well saved, are sufficiently old, possess a due amount of nutriment and have not suffered from injurious influences, such as damp and mold, as would be evident if they were musty in smell and dull in color. The presence of dust in oats proves that they have been badly saved and that their quality has undergone more or less deterioration. A shriveled up condition is also a sign of inferiority. With a plump variety of oats, if the grains feel heavy in the hand, rattle more or less like shot when poured out, rebound when they fall on wood or other hard objects and show no tendency to stick together, our good opinion of their nutritive value and sound condition will be still further confirmed. The plumper, more rounded and heavier oats are,

the higher will be their market value. Thinness of husk will also enhance the price as a rule. The cost of white oats, probably on account of their cleaner and more pleasing appearance, is higher than that of either black or tawny oats.—National Stockman.

## EARLY HISTORY OF THE AMERICAN GRAIN TRADE.

[From "The Grain Trade of the United States," a monograph by the Bureau of Statistics of the Treasury Department, published in the Monthly Summary of Commerce and Finance of the United States.]

The fact that the United States is the greatest cereal-producing country in the world, that it produces and exports more wheat than any other single country, and that the internal movement of grain exceeds in bulk and value that of any other country renders a study of the internal transportation of grain important.

The internal grain trade of the United States, as it exists at present, is of comparatively recent development. In early times both the internal and foreign grain trade of this country were of small proportions and of comparative insignificance. From the earliest period we can find traces of an occasional movement of the cereals or of flour from the American colonies, but such commerce was of no great importance.

During the eighteenth century a small surplus of grain was shipped, the exports consisting chiefly of wheat and flour from the Northern and of Indian corn from the Southern states, the principal markets being found in Spain, Portugal, and the West Indies. The export of large quantities of grain to the United Kingdom is of comparatively recent development, and as late as 1804 the shipments from the United States to that country amounted to less than \$60,000. During this early period the chief article of export among the cereal products was wheat flour, of which \$48,000,000 was exported from 1820 to 1829. During the same period the export of Indian corn meal amounted to only \$4,700,000, of Indian corn to \$4,300,000, and of wheat to but \$150,000. The comparative insignificance of this exportation of the cereal products may be more clearly seen when compared with the exports of cotton, during the same period, of \$240,000,000, or over four times the total exports of cereals and cereal products.

The peculiarity of this foreign commerce in grain, a peculiarity equally reflected in the internal commerce, was the preponderance in the transportation of the comparatively finished rather than of the raw product. As we have seen, the more portable and more valuable commodity, flour, was exported to a far larger degree than was wheat, and Indian corn meal was also shipped in large quantities.

The comparative insignificance of the grain traffic, both domestic and foreign, must be attributed chiefly to the imperfect means of transportation existing at that period. Settlements, which at first closely hugged the Atlantic shore, had steadily mounted the Hudson and other rivers as far as they were navigable, but the absence of any efficient means of transportation by land prevented a rapid development of the inland country. Railroads had not yet been invented, canals were but slowly developing, and transportation by the highway was expensive in the extreme.

It was not until the completion of the Erie Canal, in 1825, that any considerable settlement along the Great Lakes was practicable. The small trading posts along the Great Lakes, Chicago, Milwaukee, Toledo, etc., had no outlet for their surplus productions to eastern or European markets, and no incentive was offered in this region to the prospective settler or farmer.

The great natural highway of this period, however, was that of the Mississippi River and its tributaries. The purchase of the Louisiana territory, in 1803, had completely opened the great father of waters, and settlement and, in consequence, agriculture in the regions along the Mississippi and Ohio were encouraged. Wheat, flour and corn were collected at Cincinnati on the Ohio, and St. Louis on the Mississippi, and shipped down to New Orleans. Even before the evolution of the steamboat had been sufficiently advanced to allow its use in the shallows of the Mississippi, there was a large movement of grain, which drifted down the river in rudely fashioned barges. Great quantities were received at New Orleans to be reshipped for Europe, New York, or New England ports.

The extent of this inland transportation of grain from the Ohio and Mississippi rivers during this period [1820 to 1862-63] may be seen from the receipts at Cincinnati, St. Louis and New Orleans.

[These very briefly may be stated as follows: Cincinnati—Flour, 1840, 202,319 barrels; 1863, maximum, 619,710 barrels; wheat, 1846, 435,486 bushels; 1862, maximum, 2,174,924 bushels; corn, 1846, 57,245 bushels; 1862, maximum, 1,780,292 bushels; oats, 1846, 106,852 bushels; 1862, maximum, 1,338,950 bushels, etc. St. Louis—Flour, 1851, 184,715 barrels; 1863, maximum, 689,241 barrels; wheat, 1850, 1,794,-



721 bushels; 1862, maximum, 3,850,336 bushels; corn, 1851, 1,457,748 bushels; 1861, maximum, 4,515,040 bushels; oats, 1851, 888,423 bushels; 1862, 3,135,043 bushels. New Orleans—Wheat, 1835, 10,038 barrels and sacks; 1856, maximum, 869,524 barrels and sacks (this trade was very irregular); flour, 1832, 221,283 barrels; 1847, 1,617,075 barrels; 1858, 1,538,742 barrels; corn, shelled, 1832, 7,490 sacks; 1847, maximum, 2,386,510 sacks; 1858, 1,289,665 sacks, in the ear, 1832, 71,322 barrels; 1847, 619,576 barrels; 1852, 163,008 sacks, declining rapidly thereafter in favor of shelled corn; oats, 1832, 1,784 barrels and sacks; 1860, maximum, 659,550 barrels and sacks.]

#### THE ERIE CANAL, AND THE RISE OF AN EASTERN OUTLET FOR GRAIN.

While the main transportation of grain during the earlier decades of this century was by way of the Mississippi River and New Orleans, the volume of this traffic must not be overestimated. As late as 1840 more barrels of flour arrived at New Orleans than at Buffalo, but the immense impetus given to the development of the North Central states by the Erie Canal soon deprived the Mississippi River route of its preeminence. The amount of flour arriving at New Orleans increased from 221,000 barrels in 1832 to 253,500 in 1837, to 440,000 in 1842, and to 1,618,000 barrels in the very exceptional year 1847, while during the period 1856 to 1861 there was an annual average of over 1,150,000 barrels arriving in that city. Even before the vigorous prosecution of the war and the blockade of the Mississippi River, however, conditions had caused a comparative falling off of the Mississippi River grain traffic as compared with that on the Great Lakes. There were many drawbacks to the southern route. The high temperature of the Southern states and of the Gulf of Mexico caused considerable damage to the grain in transit, especially to corn, which is more liable than other grain to become overheated and spoiled. The river traffic was also liable to serious and unforeseen delays due to drouth, and at best the route was not so expeditious as the eastern route. The rapid rise of the cotton, sugar and tobacco industries in the South tended to make New Orleans a port for these products only, and the absence of facilities for the distribution of goods, such as were possessed by New York and Philadelphia, rendered New Orleans a poor importing center and caused the shipping rates on outbound traffic to be greater in consequence. As a result of these drawbacks and of the development of the Erie Canal, the fourth and fifth decades witnessed a diversion of the grain traffic from the southern to the eastern route. The receipts of grain and flour at such cities on the Mississippi River route as Cincinnati, St. Louis and New Orleans did not decrease, but they did not increase to a degree at all comparable with the increase of receipts and shipments at lake cities.

The development of the eastern route was continuous and rapid. In 1825 the Erie Canal was completed, and, during the years immediately following, a very large increase took place in the population bordering on Lake Erie and Lake Michigan. The first shipment of grain from Lake Michigan took place in 1836 from the port of Grand Haven, and in the year 1838 a consignment of 39 bags of wheat was made from a city on the west shore of the lake, Chicago, which was shortly destined to become the greatest grain center in the world. By 1841 grain began to be shipped from Milwaukee, and the completion of the Illinois and Michigan Canal and of the Galena & Chicago Union Railroad to Fox River opened up the northern part of Illinois to the grain trade.

The immediate effect of the opening up of the eastern route was the rapid extension of the grain area and the shifting of its center toward the West. In 1840 the total production of cereals in the United States had amounted to 615,525,302 bushels; by 1850 it had reached 867,453,967 bushels, and during the decade ending 1860 it had reached a total of 1,239,039,945 bushels. The production of wheat alone increased from 100,485,944 bushels, or 4.33 bushels per capita, in 1850, to 173,104,924 bushels, or 5.50 per capita, in 1860. The increase in the production of wheat had not been uniform, however, the production having been increased to a far greater extent in the West than in the East. An examination of the census returns for 1850 will show the states in the order of their production of wheat as follows: Pennsylvania, Ohio, New York, Virginia, Illinois, Indiana, Michigan, Maryland, Wisconsin, Missouri, etc. But by 1860 (crop of 1859) Illinois, which was fifth in 1850, stood easily first; Indiana, which was sixth, stood second; Wisconsin, which was ninth, stood third, etc., while Pennsylvania and New York, which now (1860) stood sixth and seventh on the list, showed an actual falling off in the amount of wheat produced.

The shifting of the wheat center during the sixth decade from the Middle to the North Central states was due to, and in turn necessitated the use of, the eastern water route. The total amount of flour and grain shipped from Chicago increased from 78 bushels in 1838 to over 56,000,000 bushels in 1862; from Milwaukee the shipments increased from 133,000 bushels in 1845 to almost 19,000,000 bushels in 1862, while the receipts at the eastern end of the

lakes increased correspondingly. In 1836 the receipts of grain and flour at Buffalo were less than one and a quarter millions; in 1862 they were over 72,000,000, while the receipts at Oswego and Toledo increased rapidly, if not at so rapid a rate as did those at Buffalo.

## Fires - Casualties

The Tarrant Grain Co., of Ft. Worth, Texas, has been burned out.

T. F. Williams' elevator at Beaver Dam, Wis., was burned lately.

J. C. Taylor's grain warehouse at Monticello, N. Y., was burned recently.

J. D. Burkhardt's feed and grain store at Milbank, S. D., was destroyed by fire May 3.

Sinsabaugh & Son's grain warehouse at St. Louisville, Ohio, was damaged by fire May 1.

Griggs Bros' wholesale grain warehouse at St. Paul, Minn., was damaged by fire recently.

Two elevators at Edinburg, N. D., were destroyed by a fire, which devastated that town April 20.

The grain elevator at Carrothers, O., fell to the ground April 23, with about 2,500 bushels of oats.

The Dominion Company's elevator at Virden, Man., with 15,000 bushels of wheat, has been burned.

The M. & N. elevator at Mapes, N. D., was burned May 2, with 14,000 bushels of wheat and other small grains.

The elevator of the Jay Grain Company at South Portland, Ind., was damaged by fire to the extent of about \$250 April 19.

Jerry Harrison, a 16-year-old boy, fell into a wheat hopper at the Salina Elevator, Salina, Kan., and was smothered to death.

The Phoenix grain elevator and flouring mill at Marietta, O., were burned to the ground early in the morning of May 1. Loss, \$100,000; insurance, \$30,000.

The elevator, feed store and outbuildings of the La Rue Miller Co., at Devil's Lake, N. D., were destroyed by fire April 20. The loss is \$1,400; insurance, \$900.

The grain warehouses of the Burlington, Cedar Rapids & Northern Railway at Decorah, Ia., burned recently, together with 600 bushels of flax and 1,600 bushels of oats.

Stultz & Meyers' elevator and warehouse at Wren, Ohio, near Decatur, Ind., was burned May 3. Eight thousand bushels of corn and wheat were consumed. The loss was \$15,000; insurance, \$7,000.

Waddell's elevator at Dominion City, Man., with 20,000 bushels of grain, was entirely destroyed by fire April 24. The building was owned by the Winnipeg Elevator Company, and was insured for about \$2,000.

F. Oswald's grain elevator at Tilbury, Ont., was burned to the ground April 24. The loss on building was about \$1,200; insurance, \$700. The contents were owned by J. L. Scott of Chatham, Ont., and were insured for \$1,000.

The grain and hay storehouse of Garland Lincoln & Co., at Worcester, Mass., was destroyed by fire May 4. Several carloads of hay and straw were ruined. The loss is about \$3,000 and is covered by insurance. The fire was set by boys.

The hay, grain and corn sheds of C. H. Emerson, at East Weymouth, Mass., were destroyed by fire early in the morning of April 26. The loss on the building was about \$1,500, and on stock \$10,000, both losses being covered by insurance.

F. K. Stacy & Son's elevator at Bloomdale, O., narrowly escaped destruction by fire April 13. The fire was first noticed in the upper story of the building by an employee, who put out the blaze by quick work with a hand fire extinguisher.

The breaking of a conveyor belt between the Great Northern Elevator A at Duluth and the annex complicated matters somewhat during the recent jam of boats at the elevators in that port. The rush was so great that some of the boats were delayed.

The elevator and flouring mills of Traucht & Reddick, at Arlington, O., were nearly destroyed by fire about 9:30 o'clock a. m., April 7. The fire is supposed to have originated from a hot box in the elevator. The loss is estimated at about \$3,000, covered by insurance.

Fire at Lesterville, S. D., at 4 o'clock a. m., April 11, destroyed the McCall-Webster grain elevator with 60,000 bushels of grain, and the Hunting elevator. The buildings and McCall-Webster's grain were fully insured. The Hunting elevator was oc-

cupied as a machinery warehouse, and the contents, including 500 bushels of corn, were not insured. The fire was set by tramps sleeping under the elevators.

An elevator located at Hartsburg, Ill., and owned by County Treasurer J. Ed. Miller, was burned to the ground April 25. The elevator contained about 1,000 bushels of grain. A warehouse near by containing 4,000 bushels more was also consumed. Elevator and contents were insured for \$3,000.

The Northern Elevator, at Emerson, Man., owned by D. H. McMillan, burst, and several thousand bushels of wheat ran out. The break has been repaired. Manager A. R. Bowes climbed up the iron sides of the building at great personal risk and managed to stop the wheat where the timbers gave way.

The old Wilcoxon grain elevator, that has stood for forty years at the intersection of the Big Four Railway tracks and Walnut Street in Muncie, Ind., was destroyed by fire about 10 o'clock a. m., April 30. The building had not been occupied of late. The loss on building and machinery was about \$3,500.

The elevator of Dunaway, Rockriegel & Co., located near the Rock Island railroad depot in Ottawa, Ill., was burned about 6 o'clock a. m., May 11. The power house was saved, but the elevator building and contents were practically ruined. The total loss is about \$12,000. The building was insured for \$3,500, and contents for \$2,000.

Dowling & Purcell's elevator at North Bend, Neb., was destroyed by fire April 26, about 5 o'clock p. m. The fire was discovered in the upper part of the elevator and is supposed to have been caused by the heating of the grain. The loss is total. The building was valued at \$6,000 and was insured. Several carloads of grain were in the bins and were burned.

An elevator at New Paris, Ind., owned by Byron B. Brothers, of Goshen, Ind., was destroyed by fire May 2. The blaze originated in one of the upper stories, presumably from a spark from a locomotive. Mr. Brothers' loss on the building was \$4,000, with \$1,600 insurance. There was no insurance on contents. He is undecided as to whether he will rebuild.

The Fort Worth grain elevator, at Fort Worth, Tex., was burned, with 25,000 bushels of grain, April 17. The building was erected by Mark Evans some years ago and was owned by Mrs. Mark Evans. It was under lease to Roger Campbell and Duncan Urquhart. The capacity of the elevator was 125,000 bushels and it was valued at \$10,000, and was insured. The contents were worth \$14,500, insurance \$12,500.

The elevator at Stewart, Minn., owned by the Farmers' Co-operative Shipping Company, was destroyed by fire early Friday morning, April 20. The fire was discovered about 2 o'clock a. m. and had then gained such headway that it could not be subdued. The building was leased to F. M. Parks and E. G. Lenton, who had about \$2,000 worth of grain and seeds stored in it. They carried insurance of \$1,500. The building was valued at about \$3,000 and was insured for \$2,000.

The elevator known as the west elevator, at York, Neb., was burned with its contents about 11 o'clock p. m., April 9. It is supposed that the building was struck by lightning, as a heavy storm was prevailing at the time. The elevator was owned by G. B. Chessman and leased from him by McCloud & Miller, who operate the east elevator. They lost \$12,000 worth of wheat and rye, which was insured for \$6,000. The building is a total loss, with no insurance. It was valued at \$4,000.



FOREIGN DEMAND AN UNCERTAIN QUALITY.

Uncle Sam has a bountiful supply, but will the foreigners eat a big hole in it? The above picture shows a hungry look, but can they be compelled to eat? Argentina has not been slow in presenting her bill of fare, and delivered the goods, too.—Zahm's Red Letter.



## FLAXSEED

H. U. Thomas, Commissioner of Agriculture for North Dakota, is the new president of the National Flax, Hemp and Ramie Association.

The flax mill of Pickup Bros., at Truesdell, Wis., which was recently removed from Kenosha, was destroyed by fire. Loss about \$1,000.

Mrs. O. N. Olberg, of Albert Lea, Minn., who has been a prominent advocate of flax culture for many years, has been appointed a judge in the textile division of the Paris Exposition.

It is now predicted that twice the acreage of last year will be sown to flax in Minnesota and North Dakota this season. The only limit to the flax acreage will be the ability to buy seed.

Flax will be a new crop in Northern Indiana this year, replacing winter wheat, which has been a failure. The farmers of that section believe it will be a more profitable crop than either corn or oats.

In 1897 Steele County, N. D., raised 3,000 acres of flax; in 1898, 10,000 acres; in 1899, 20,000, and this year there will be not less than 25,000 acres. The farmers of that section are looking forward to a prosperous year.

The shipments of flaxseed from January 1 to April 1, 1900, are reported as follows, all of which went to Western Europe: India, 1,189,000 bushels; Russia, 1,412,000 bushels; America, none; Argentina, 6,382,000 bushels; total, 8,983,000.

Leffingwell Bros'. linseed oil mill, at Fargo, N. D., has been sold to the American Linseed Company. Leffingwell Bros. are said to have received stock in the company in payment. They will continue the management of the mill, whose product has been for the Antwerp trade.

Flaxseed prices in Chicago during May have reached higher figures than for twenty years past. Cash and May seed have generally sold this month at about \$1.80, which is 10 cents a bushel higher than the price in May, 1884, \$1.70, the only record approaching it of late years.

From Kansas comes a report which estimates the flax acreage at about 80 per cent of last year's sowing, because of shortage of seed. The writer thinks it may be even less than that, owing to the fact that seed dealers throughout the state are short of seed and cannot supply the farmers of their sections.

Estimates are that European needs of flaxseed during the remainder of the year 1900 will call for 28,000,000 bushels, of which Argentina is expected to furnish 3,000,000 bushels and India 12,000,000. This would leave about 13,000,000 bushels to come from Russia and America, or nearly 3,500,000 bushels more than these two countries shipped to Europe in 1899.

Argentina exported in 1899 8,376,000 bushels of flaxseed, as compared with nearly 7,000,000 bushels in 1898 and 6,000,000 bushels in 1897. Exports from Uruguay in 1899 were 47,000 bushels, as compared with about the same amount in '98 and '97 and 78,000 bushels in 1896. The South American farmer gets \$1.10 to \$1.20 per bushel for this seed, all of which is purchased by Europe.

The National Lead Company has recently bought 55,000 bushels of American flaxseed in Liverpool and reshipped it to this country at a cost of about \$1.50 in New York. The scarcity of seed in this country is emphasized by the fact that large consumers have to go abroad for their supply and can profitably bring back American seed which was shipped out early in the season.

Scarcity of seed is likely to keep down the flax acreage in Southern Minnesota and South Dakota. Farmers there who sold their seed last fall, expecting to replace it at a lower price from North Dakota, are not now inclined to pay the advance of 50 cents to \$1 over their selling price. The big increase in flax area will be in North Dakota, where it is estimated the increase may amount to 500,000 acres. It will not be possible to make an accurate estimate until about June 1, when the North Dakota seeding will be completed.

Stockholders in the National Linseed Oil Company, representing 4,600 shares of stock, have filed a petition in the United States Circuit Court asking that a receiver be appointed to preserve the assets of the company, which they allege are being dissipated. Charges of mismanagement of funds and of illegal use of the company's money for speculation are made against President Alexander Euston, Treasurer T. G. McCulloch and the directors. The company, it is alleged, sold its mills and plants by a secret vote of the directors in December, 1898, to the American Linseed Oil Company, known as the "Linseed Oil Trust," for a consideration which is not known. This action is called illegal. The petition further alleges that since this sale the National Linseed Oil Company has not been conducting the busi-

ness for which it was organized, but that its officers are drawing their salaries and that the stockholders have no means of remedy within the company, as their stock has been deposited with the Central Trust Company of New York, which refuses to give it up. It is charged also that the officers and directors for several years have managed the affairs of the company disastrously, by speculating, first in the stock of the company and later in flaxseed, in an attempt to corner the market, and that the losses to the company through these speculative deals have aggregated \$633,000. The court is asked to appoint a receiver to conserve the assets of the company not already sold to the American Company, and which are estimated at \$109,000.

## EUROPEAN INDIAN CORN.

In Europe the most suitable countries for the growth of maize are those of the Danube. The general configuration of the country is an inclined plain sloping down from the Carpathian Mountains to the northern bank of the Danube, and it is traversed by numerous water courses (many of which are dry in summer) taking their rise in the mountains and falling into the great river, and which render the countries well adapted and suitable for its growth.

[It appears from this writer that Great Britain and Ireland imported more European than American maize in 1896, 1897 and 1898] and indeed it is the maize grown in Europe which is preferred by the English makers of flaked malts. This class of maize is more regular in size and more approaches to the round in shape; indeed, on the markets it is called round maize, and is chiefly shipped to Great Britain from Odessa and Galatz. Climate has much influence on its physical characteristics, and it is a noteworthy fact that seed of American maize grown in Europe loses its distinctive character, the first year's growth being less in height, and in three successive years nearly losing all resemblance, and in six years is completely changed and cannot be distinguished from the native grown variety. The same feature is noticed if seed from European maize be sown in America; the plants quickly adapt themselves to their new conditions and lose their distinctive European character. The same features are observable with this cereal when grown in America, as certain varieties will not grow and flourish in both the Northern and Southern states. It is very prolific and will multiply in some cases over 1,000 fold.

Mr. Darwin, in his "Animals and Plants under Domestication," notices the following facts, and writes: "In some kinds a single grain equaled in weight seven grains of another variety. The grains of some kinds were broader than long; in some kinds the grains were longer than broad. They differ greatly in precocity, and have different powers in resisting dryness and the action of violent winds. A white variety is grown on the Pyrenees and on the plains of Piedmont; it has been cultivated for nearly a century and has undergone no change of color." Mr. Darwin also says the different races or kinds vary in height from 16 to 18 inches to 18 feet.—From an article by J. A. Fawcett, F. C. S., in the Journal of Federated Institutes of Brewing.

## DIGESTIBILITY OF CORN.

In a bulletin on corn, Professor Wiley, chemist of the Department of Agriculture, combats the opinion that corn is less digestible and less nutritious than wheat. In experiments made upon animals the nutritive value of corn has been distinctly brought out. A bushel of wheat in one set of experiments produced on an average 13.7 pounds of pork, while a bushel of corn produced 12.3 pounds. But when the difference in weight between the two is considered the actual gain is about the same in each case, and, calculated upon the market price of wheat and corn, it costs \$4.01 to produce 100 pounds increase in pork by feeding wheat, and \$2.85 to produce the same increase with Indian corn.

In point of digestibility for human beings, which is something rather harder to reach by practical tests, the conclusion is offered based on what is known as digestion coefficients of wheat and other grains, that Indian corn is not inferior in this respect to wheat. Bread made from Indian corn is the great food of the southern part of the United States. With fat pork it is the food upon which severe manual labor is performed in a climate excessively trying to the laborer on account of its heat.

To rid a ship of rats, Le Yacht, of Paris, recommends the use of carbonic acid gas. Owing to its specific gravity the gas lies in the lowest parts of the hold, penetrating into every chink and crevice, and asphyxiating the rats, the dead bodies of which can be removed after the hold has been aerated. Before entering the hold a lighted candle should be lowered into it, to ascertain if any of the gas remains.

## Late Patents

Issued on April 10, 1900.

Grain Car.—Wm. L. Callison, Heron Lake, Minn., assignor of one-half to John W. Rodgers, same place. Filed January 13, 1900. No. 647,440. See cut.

Grain Treating Apparatus.—James L. Hollingsworth, Newbern, Tenn. Filed August 28, 1899. No. 647,301. See cut.

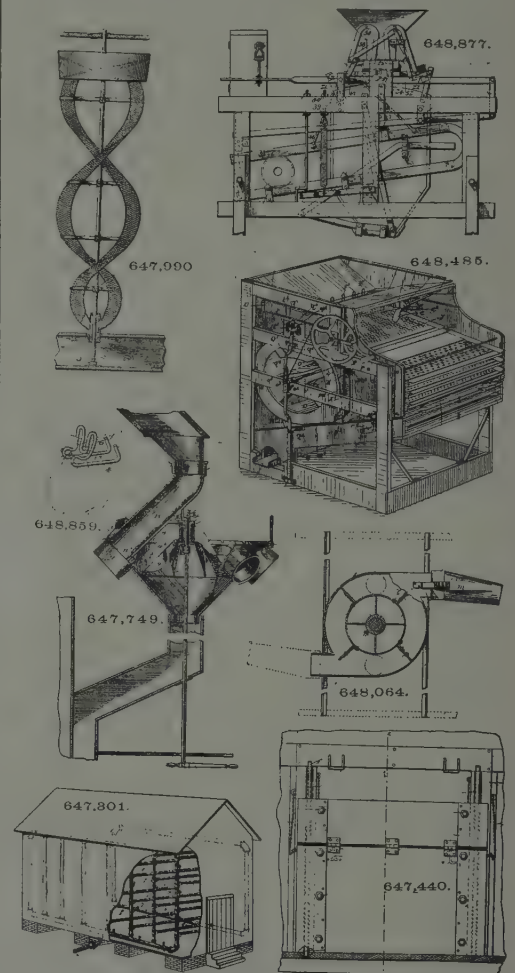
Weighing and Bagging Machine.—Alonzo C. Bosworth, Putnam, Conn. Filed August 9, 1899. No. 647,371.

Issued on April 17, 1900.

Explosion Engine.—Charles A. Scott, Cedar Rapids, Iowa. Filed August 1, 1899. No. 647,583.

Combined Truck and Sack Holder.—John B. Finley and Benj. O. Branch, Memphis, Tenn. Filed July 22, 1899. No. 647,820.

Gas Engine.—Wm. R. Dow, Boulder Creek, Cal. Filed July 30, 1898. No. 647,651.



Grain Distributor.—Thomas F. Hall, Omaha, Neb., assignor to Amelia J. Hall, same place. Filed December 2, 1899. No. 647,749. See cut.

Issued on April 24, 1900.

Automatic Car Loader for Grain.—John C. Bean, Sullivan, Ill., assignor of one-half to Charles D. Cole, same place. Filed July 14, 1899. No. 648,064. See cut.

Electric Igniter for Explosive Engines.—W. F. Davis, Waterloo, Iowa, assignor to the Davis Gasoline Engine Works Co., same place. Filed May 22, 1899. No. 648,122.

Electric Igniter for Gas Engine.—Walter H. Cotton, Chicago, Ill. Filed June 26, 1899. No. 647,946.

Grain Cleaner and Scourer.—Wm. W. Salisbury, Berea, Ohio. Filed September 6, 1899. No. 647,990. See cut.

Issued on May 1, 1900.

Fastening Device for Bags.—Cohn F. Doner, Lima, Ohio, assignor of two-thirds to James H. Woods, same place, and Wm. C. Hall, Indianapolis, Ind. Filed December 11, 1899. No. 648,859. See cut.

Grain Cleaner and Separator.—Thomas H. Cooper, Toronto, Canada, assignor to the Toronto Grain & Seed Cleaner & Grader Mfg. Co., Ltd., same place. Filed February 11, 1899. No. 648,485. See cut.

Automatic Grain Weighing Machine.—Angus McLeod and John H. McLeod, Marietta, Kan. Filed June 5, 1899. No. 648,877. See cut.



# PRESS COMMENT

## THE CONNERS SYNDICATE AT MONTREAL.

It will be very strange if the promoters of the Montreal route do not find that "there are others" when they get ready to carry grain for export. If they gather in the whole business, as they now talk of doing, it will be because the railroads don't want it.—Rochester Union.

## THE KNIGHTS OF THE SOIL.

The scheme is entirely philanthropic. It is too beneficent to commend itself to the harsh commercial doctrine of "might is right," that obtains in these last days of the nineteenth century. The association may be utopian in character; it certainly does not smack of New Jersey; and those who charge the farmers with forming a trust do so simply to justify their cowardice in failing to deal with the real, menacing trusts.—Denver Post.

## CANADIAN ELEVATOR COMMISSION REPORT.

The commission has rendered good service to the farming interests of the West. It has shown the need of legislative interference, and has collected sufficient information to guide the ministry in framing a statute that will give effect to its recommendations. . . . It would be unfortunate if eagerness to safeguard every danger-point should lead to an excess of restrictions tending to defeat the purpose of the proposed legislation.—Toronto Globe.

## GERMANY AND HER FOOD SUPPLY.

Germany may succeed in making food expensive enough to restore the profits of agriculture, but that would make life on the present scale of living impossible to the industrial population, and a lowering of the scale of living would reduce the efficiency of the workers or stimulate their immigration, or both, and in any case would prove a serious blow to Germany as a manufacturing nation. Germany has got to admit food from the comparatively new and cheap lands of the United States or succumb as a manufacturing nation; she cannot be both a farm and a workshop.—New York Journal of Commerce.

## THE FARMERS' TRUST.

An international agreement of farmers to restrict grain production, very well in theory, is an academic bubble that its framers would be the first to puncture under stress of competition.—Chicago Chronicle.

Conceive the quixotish nature of a scheme to induce millions of independent farmers, in all parts of the world, to put in a small crop for the common weal! A crazier project was never introduced before the world's intelligence.—Spokane Review.

The revival of that familiar story about a farmers' combination to restrict the acreage of wheat and force the price up to \$1 per bushel, is an illustration of how a few persons will pursue and the press will circulate a delusion which everyone acquainted with the subject knows to be utterly absurd.—Pittsburg Dispatch.

We fear that if only a small percentage of them undertook the plan they would tire out before they got the dollar a bushel for their wheat. The greatest evil of the trust is the fact that the great mass of mankind cannot get into it.—Marshall (Mich.) News.

It is by no means impossible to form a combination among the farmers in the states that produce the largest quantities of wheat, but whether that combination would be effectual for the purpose of putting up prices is another question.—Louisville Courier-Journal.

In a condensed form all the suggestions and advice they will receive from people who have been involved in such deals, and who are not prejudiced by the result, can be easily condensed into the one word, "Don't."—Chicago Inter Ocean.

It will do no harm for these gentlemen to work away on this scheme. Even if they are unable to bring about any universal reduction of wheat acreage, they may induce a farmer here and there to diversify his products and not rely so exclusively upon wheat raising. In most cases a diversifying of industry will prove of genuine benefit.—Minneapolis Tribune.

There is a practical side to this question of assisting the agricultural interest, but to attempt to form a pool of agriculturists over the world is a good deal like a proposal to move the Alps Mountains nearer the Baltic Sea.—Minneapolis Journal.

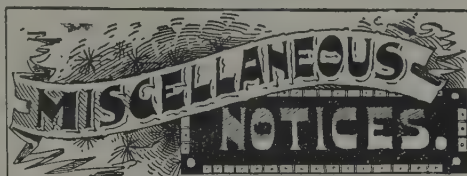
If the farmer can get a dollar a bushel for his wheat, let him get it, and much good do him. The chief consideration is, can the rest of us pay it? Will there be enough coincident and concomitant

prosperity to offset the rise in price of the staff of life?—Galt (Ont.) Reformer.

As for the artificial scheme to produce \$1 wheat, the mere idea that any such a plan was under contemplation would cause thousands of enterprising farmers to plant more wheat than ever. The project is foolish and impracticable.—Chicago Tribune.

Theorists and visionaries may revel in such schemes as the one set forth, but it is quite as remote from realization as the scheme of universal Christian socialism, and far more remote than that of the world's disarmament. The Swiss professor should have another dream.—Jacksonville (Fla.) Times-Union.

The operator of the Cleveland Grain Drying Company of Cleveland, O., has been again arrested on a charge of creating offensive odors by drying spent malt.



[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

## WANTED, LEASE OF ELEVATORS.

Wanted, to lease a good grain elevator at once, with privilege of purchasing in one year.

A. C. KAISER, 1207 Locust St., Des Moines, Iowa.

## ELEVATORS WANTED.

Party wants to buy independent or line elevators on the line of the Soo Railway. Address

MINNESOTA, Box 5, care "American Elevator and Grain Trade," Chicago, Ill.

## REPRESENTATIVES WANTED.

Millwrights, machinery dealers and manufacturers' agents wanted to represent us in their territory, on commission, for the sale of elevating, conveying and power transmitting machinery, mill and elevator supplies. Address

WELLER MFG. CO., 118 and 120 North Ave., Chicago, Ill.

## BUYERS WANTED.

Wanted, a few good grain and hog buyers on new line of C. & N. W. R. R. between Belle Plaine, Iowa, and Fox Lake, Minn. Only men of experience with good references need apply. State in first letter salary wanted, age, married or single, how long have bought grain in a regular elevator, where, and how soon at liberty to accept position. Address

A. J. ZINGRE, Mgr., Nye & Schneider Co., Mason City, Iowa.

## POSITION WANTED.

Bright, active young man, single, speaks German and English; 7 years in the grain business; have managed several large elevators with both steam and gasoline power, and can furnish gilt-edge references, wants good, permanent position in grain business, Central or Southern Minnesota preferred. If you want a good man, write and be convinced. Address

MANAGER, Box 5, care "American Elevator and Grain Trade," Chicago, Ill.



[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

## SEPARATOR FOR SALE.

One Barnard & Leas Cornwall Tubular Grain Separator, in good condition. Address

J. D. H., Box 4, care "American Elevator and Grain Trade," Chicago, Ill.

## FOR SALE.

A 6-horse power gasoline engine, elevator belts and buckets, wagon and hopper scales. Address G. M. SLOAN, 443 S. Robey St., Chicago, Ill.

## ENGINE FOR SALE.

One 20 h. p. side crank stationary engine in first-class shape. Send for description and price.

DOWNIE-WRIGHT MFG. CO., York, Neb.

## ENGINES AND BOILERS.

For sale, a quick-stroke 40-horse power automatic engine. Also a lot of different sizes of boilers and engines for sale cheap. Address

PHILIP SMITH, Sidney, Ohio.

## GASOLINE ENGINES FOR SALE.

One 7-h. p. Weber Gasoline Engine, \$195. One 10-h. p. Fairbanks-Morse, \$325. One 15-h. p. Norman (Chicago), \$250. One 10-h. p. Otto, \$275. One 20-h. p. Springfield, \$375. Replaced with Backus Engines. Moral: Buy the best at the start.

BACKUS GAS & GASOLINE ENGINE CO., 171 173 Lake St., Chicago.

## ELEVATORS FOR SALE.

Elevator 15,000 capacity, horse power, located in corn and oats district of Central Illinois.

Elevator 25,000 capacity, steam power, Cedarburg, Wis.

Elevator 20,000 capacity, steam power, Oconomowoc, Wis.

Also elevator located on C. M. & St. P. R. R., Bonilla, S. D. Inquire of

BERGER-CRITTENDEN CO., 49 Chamber of Commerce, Milwaukee, Wis.

## BIG BARGAINS IN ROLLS AND ENGINES

A number of double 9x18 and 9x24 roller mills. Four 2-pair high and five 3-pair high feed mills. Ten 3-roller feed mills, all sizes.

Twenty gasoline engines, Fairbanks-Morse, Otto and other makes, from 2 up to 50 horse power.

Ten stationary engines and boilers, also three fine traction engines.

All of the above are as good as new.

Roll corrugating on best machines at big discount.

Write at once for prices on anything in mill or elevator machinery.

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Of Northern Illinois, Wisconsin, Minnesota and Michigan, there are hundreds of the most charming Summer Resorts awaiting the arrival of thousands of tourists from the South and East.

Among the list of near-by places are Fox Lake, Delavan, Lauderdale, Waukesha, Oconomowoc, Palmyra, The Dells at Kilbourn, Elkhart and Madison, while a little further off are Minocqua, Star Lake, Frontenac, White Bear, Minnetonka and Marquette on Lake Superior.

For pamphlet of "Summer Homes for 1900," or for copy of our handsomely illustrated Summer book, entitled "In the Lake Country," apply to nearest ticket agent or address with four cents in postage, Geo. H. Heafford, General Passenger Agent, Old Colony Building, Chicago, Ill.

## HAGERTY & GRABER,

PEORIA, - ILL.,

CONTRACTORS FOR GRAIN Elevators and Malt Houses.

Plans and Estimates Furnished.

Also Keep a Full Line of Machinery in Stock, such as

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## E. R. Ulrich & Sons, SHIPPERS OF WESTERN GRAIN,

Especially High Grade White and Yellow Corn, Also Mixed and White Oats.

Elevators through Central Illinois on Wabash Ry., Chicago & Alton Ry., C. P. & St. L. Ry., and St. L. C. & St. P. Ry.

Main Office, 6th Floor, Illinois National Bank Building, SPRINGFIELD, ILLINOIS.

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All kinds of Bags, New and Second-Hand.  
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FACTORIES: CHICAGO } Marshalltown }  
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Galvanized and Painted Corrugated Iron.  
H. W. John's Asbestos Roofing.

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Write for Prices.

**WHEELING CORRUGATING CO.,**

185-187 LAKE STREET, CHICAGO,

Corrugated Sheets or Steel Roofing  
for Grain Elevators.

WRITE FOR PRICES.

**The Garry Iron and Steel Roofing Co.,**

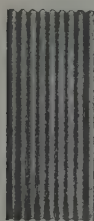
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MANUFACTURES



Steel Roofing,  
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We make a specialty of  
Corrugated Iron and Metal Roofing  
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And take contracts either for material alone or job completed. We have done a large amount of this work in the past three years, in fact, we are the largest manufacturers of this material in the Western States. Write us for prices. We can save you money.

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[We will not knowingly publish the advertisement of a bucketshop keeper or irresponsible dealer.]

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MERCHANTS,

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**H. HEMMELGARN & CO.,**

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Consignments Solicited. Correspondence Invited.

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Write, wire or phone us when you want to trade.

If you don't get them ask for our bids, your track.

WM. J. POPE, Prest.

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HONEST WORK,

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Consign your grain to us.

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E. S. WOODWORTH, Prest. W. S. WOODWORTH, Secy and Treas.  
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**E. S. Woodworth & Co., INC.,**

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Receivers and Shippers of Grain,  
Flour and Mill Stuffs.

Usual Advances made on consignments; prompt returns guaranteed. Orders in futures executed in any market. Extensive shippers of Bran, Middlings and Low Grade Flours. Also Chicken Feed Wheat, of which will send samples on request. Millers and grain dealers having screenings to dispose of, send us samples and we will make you a bid.

References { Any Bank or Mill in Minneapolis.  
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**C. A. KING & CO.**

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SPECIAL MARKET AND CROP  
REPORTS FREE.

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(CAR LOTS ONLY.)

Will buy on any railroad and can make shipment via any line. Milling wheat a specialty. Write or wire for prices. Will give prompt reply. References: Farmers' National Bank, Greenville Bank Co. Dun or Bradstreet. Correspondence solicited.

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Make all drafts on Main Office.

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**L. Bartlett & Son,**  
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Careful attention given to orders from Brewers, Maltsters and Millers.

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Refer to { Continental National Bank, Chicago, Established  
{ Corn Exchange National Bank, Chicago. 1862.

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AND TRACK BUYERS,  
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J. H. WARE. E. F. LELAND.

Consign your GRAIN and SEEDS  
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**WARE & LELAND,**

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WRITE FOR OUR  
DAILY MARKET LETTER.

Fifteen representatives constantly on the floor of  
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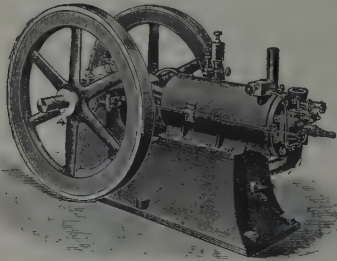


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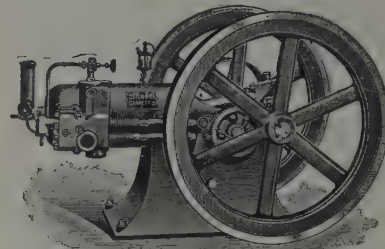
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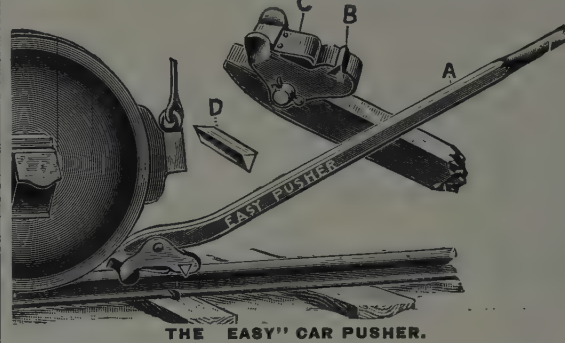
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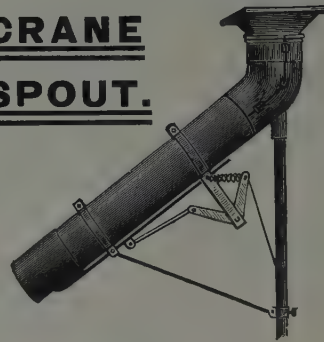
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Saves You *Half the Power and Half the Shrinkage.*

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That will load cars without shoveling. It is worth its weight in gold. It will save you in labor all it costs in less than a month.



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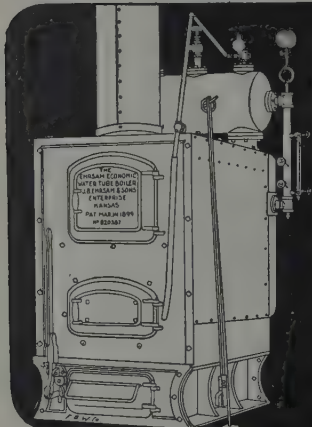
Grain men will find upon investigation, that better satisfaction is obtained from the

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For 1899--1900.

This Gazetteer contains freight agents' official list of flouring mills, elevators, grain dealers, shippers and commission merchants, located on all the principal railroads in the United States and Canada.

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The volume contains over 200 large pages, in a durable cloth binding. Sent postpaid on receipt of \$1.00.

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SOLVES THE PROBLEM OF CRIBBING EAR  
CORN WITHOUT SHOVELING.



It attracts the most profitable part of the grain business. The Ven'ilated and Combination Grain Bin is excellent ear corn storage, is rat proof, and a tight bin for anything. It requires only  $\frac{1}{4}$  foot of lumber per bushel of storage. The reduction in cost of storage compared with even a common temporary ear corn crib will pay for the Incline Elevator and Dump to fill it. Dealers having belt elevators would profit by adding our ear corn, oats, wheat, etc., storing facilities. Extensive farmers and feeders would also find improvement and profit by adopting it. Each team elevates the load it brings. Power is always ready and costs you nothing. Will elevate 20 or more of the largest loads per hour.

**Our Plan for Dealers' Complete Elevator Plants.** Less than one-half the investment and one-third the expense of operating an ordinary elevator. Unexcelled for speed, convenience and economy of handling shelled grain and also ear corn for shelling or cribbing purposes. It successfully competes with belt elevators. Plenty of capacity is provided in the hopper bottom shipping bins (which are of the right height to spout direct into cars) for grain purchased for shipment, while ear corn, oats, wheat, etc., are stored in the combination bin below. \$3,500 will complete a 100,000-bushel plant having twenty 1,000-bushel shipping bins, chute direct from top of building and a number of combination bins with total capacity of 80,000 bushels of small grain or 40,000 bushels of ear corn. Gravity or power cleaners, conveyors, sheller, engine, etc., may be added.

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## ANNUAL MEETING

OF THE

### Illinois Grain Dealers' Association

To be held at

DECATUR, ILL., JUNE 12 AND 13,

### The Illinois Central Railroad

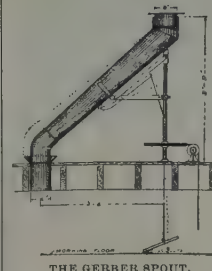
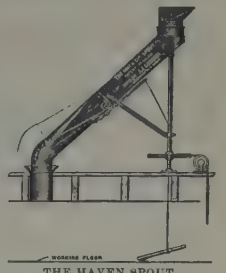
*Offers service unsurpassed; with  
trains as follows:*

CHICAGO.		DECATUR.	
11:20 a. m.		3:51 p. m.	
9:10 p. m.		2:55 a. m.	
5:30 p. m.	via Champaign.	10:35 p. m.	
DECATUR.		CHICAGO.	
1:35 a. m.		7:35 a. m.	
3:55 p. m.		8:30 p. m.	
6:30 a. m.	via Champaign.	11:40 a. m.	

## The HAVEN Grain Distributing Spout AND ... The GERBER Improved Distributing Spout

MANUFACTURED BY

**J. J. Gerber Sheet Metal Works,** 128 Sixth Ave. South,  
MINNEAPOLIS, MINN.



THE GERBER SPOUT.

**THE HAVEN GRAIN DISTRIBUTING SPOUT** for country elevators is designed to prevent the mixing of grain in the elevator while being transferred from the elevator pit to the different bins. It is built with pivoted rectangular lower end section, as shown in cut, allowing the lower end of spout to be raised completely out of funnel or spout leading from the cupola floor to the bins. The operator pulls a cord from the working floor of the elevator and swings the spout to the desired bin, and the lower section of the spout drops into the proper opening by releasing the cord. It is constructed with heavy cast-iron hopper at top, having a heavy cast-iron elbow at top and bottom. The balance of the spout is built from heavy sheet steel.

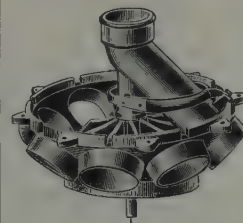
**THE GERBER SPOUT** is operated by pressing a foot lever to the floor; is substantially built, and is giving satisfaction in a large number of houses as a serviceable spout.

We also furnish mill and elevator spouting of all descriptions.

Agents: Link-Belt Supply Co., Fairbanks, Morse & Co., C. D. Holbrook & Co., Minneapolis, Minn.

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**AUTOMATICALLY NOTIFIES OPERATOR WHEN BIN IS FULL.**

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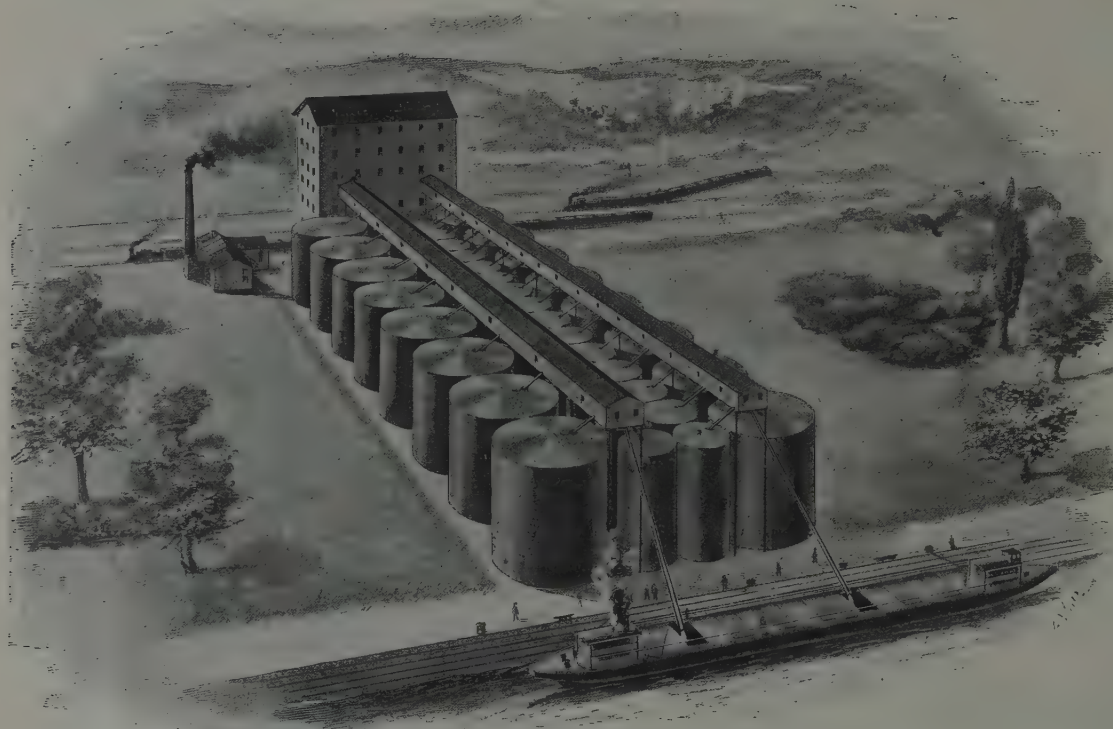


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Manchester Ship Canal Co.'s Elevator, Manchester, England	1,500,000
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Canada-Atlantic Railway Elevator, Coteau Landing, Que.	500,000
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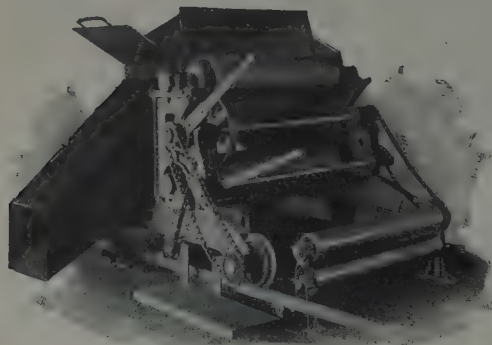
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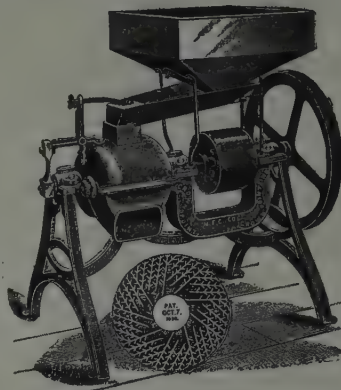
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Do not dull when running together.

Grinds OATS perfectly fine and all grain, damp and dry.

No heating of grain; no lost motion.

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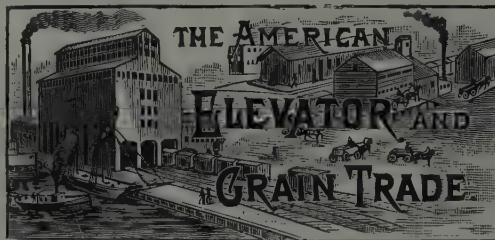
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It is not a daily market report, but covers broadly every phase of the business from the production of the grain to the consumption of the manufactured products.

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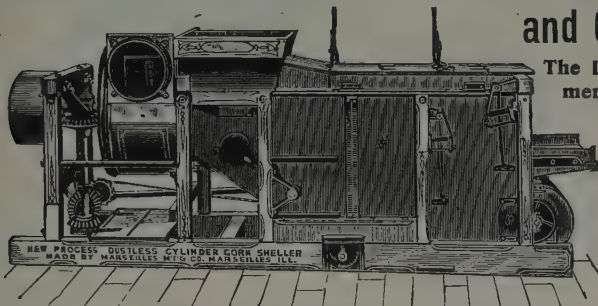
It covers broadly and completely the business of buying, selling and handling grain. It illustrates and describes the latest storage, handling and transportation achievements. It deals broadly and vigorously with all questions and usages affecting the welfare of the trade. It enters into the details of things sufficiently to be helpful to even the smallest dealer in his daily business.

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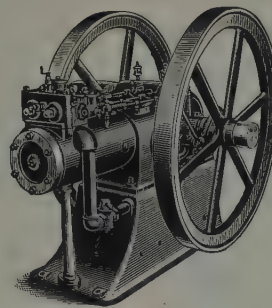
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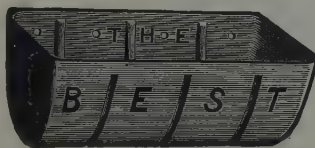
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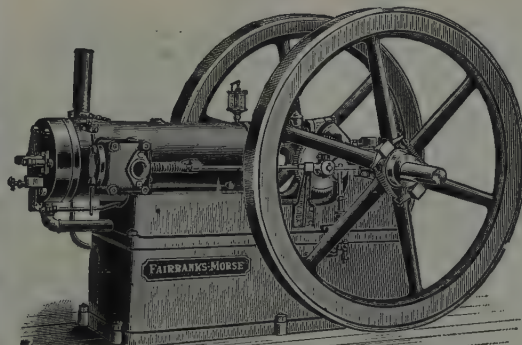
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— ARE LIKE —

**FAIRBANKS SCALES,  
Standard,  
Durable,  
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**CONVEYORS**

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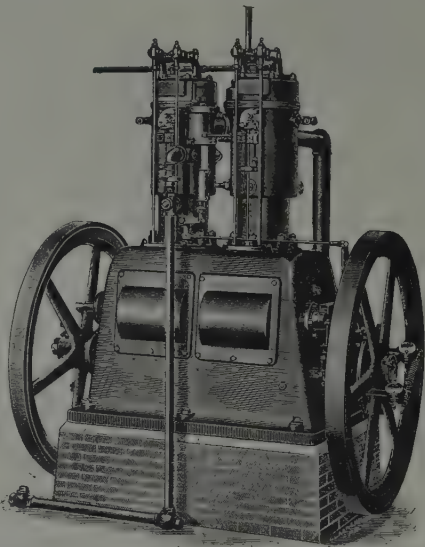
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FROM 1 TO 100 HORSE POWER.

Regulation as good as automatic steam engines.  
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All parts interchangeable and accessible.  
Every engine tested before leaving the shop.  
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**THE BEST ELEVATOR AND MILL ENGINE.**

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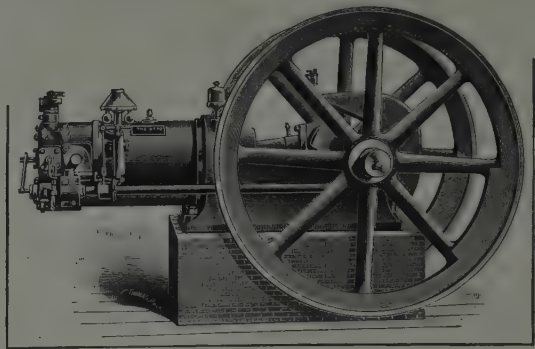
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VERTICAL, Single Cylinder, 2, 4, 6, 8, 10 h.p. TANDEM, Double Cylinder, 10 to 60 h.p.

We are pleased to quote and send catalogue.

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**The St. Anthony & Dakota Elevator Co.**

150 Country Elevators, Capacity 5,000,000 Bushels.

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GENTLEMEN:—Replying to your inquiry as to how we are suited with the Otto Engine as power for operating our country elevators, will say: We have now in operation sixty of your engines, some of them have been running four years, and we have to-day given you an order for thirty more engines to be furnished as soon as you can get them out. This ought to be, and in fact is, all the recommend we can give you. If we were not satisfied with the engines we would not buy them. So far we have not been obliged to pay out a dollar for repairs. We find the engines always ready when we want to use them, very economical in the use of gasoline, and fully up to the capacity claimed by you for them.

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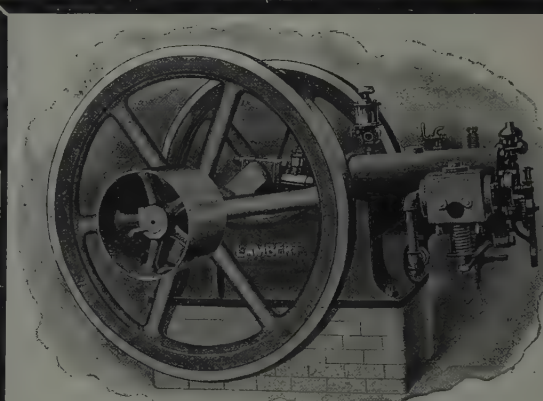
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GAS AND  
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## INSURANCE

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Is furnished at cost by the

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It is a Mutual Company which insures more mills and grain elevators than any other company in the United States.

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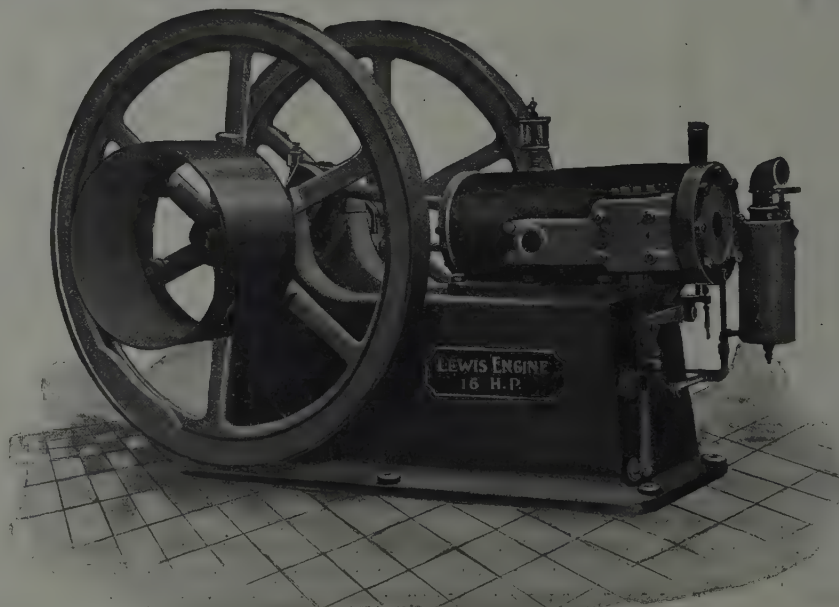
Its cash assets, January 1, 1900, amounted to \$721,927.11; total admitted assets, \$2,708,613.34; net cash surplus, \$469,382.27; surplus over all liabilities, \$2,456,068.50.

The same conservative management which has directed the Company's affairs all through its prosperous existence will be continued.

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## ORIGINAL LEWIS GASOLINE ENGINES



Gold Medal  
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Most popular and reliable  
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Grain Elevators,  
Water Works,  
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Volume Governor, Double Exhaust, Air Adjustment to Regulate Mixture.

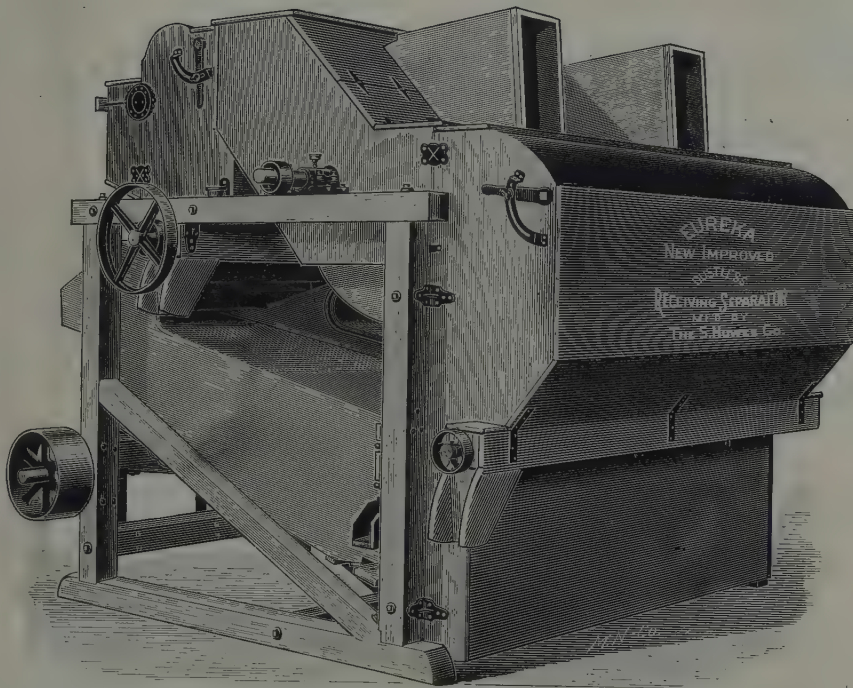
**J. THOMPSON & SONS  
MFG. CO.,**

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*THE BEST AND MOST EFFICIENT, namely:*

# **“Eureka” Elevator and Warehouse Separator, Improved “Eureka” Double Receiving Separator, and Improved “Eureka” Elevator Separator,**



NEW IMPROVED EUREKA ECCENTRIC COUNTER-BALANCE ELEVATOR SEPARATOR.

Will clean grain better in one operation than other machines will in two or three. It is the most perfect and efficient machine on the market for the purpose of SEPARATING OATS from WHEAT. No grain handler can afford to be without one of these machines.

Will pay for itself in a very short time.

*Our “1900” Catalogue Furnished on Application.*

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Duplicate parts of all Eureka machines built, from the time of Howes, Babcock & Co. in 1856 until the present.

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# If You Are a Handler of Barley, Malt or Oats, THESE MACHINES ARE INDISPENSABLE.

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We also make a complete line of power separators and oat clippers. Our new catalogue is now out and we would like to send you a copy. Postal card us.

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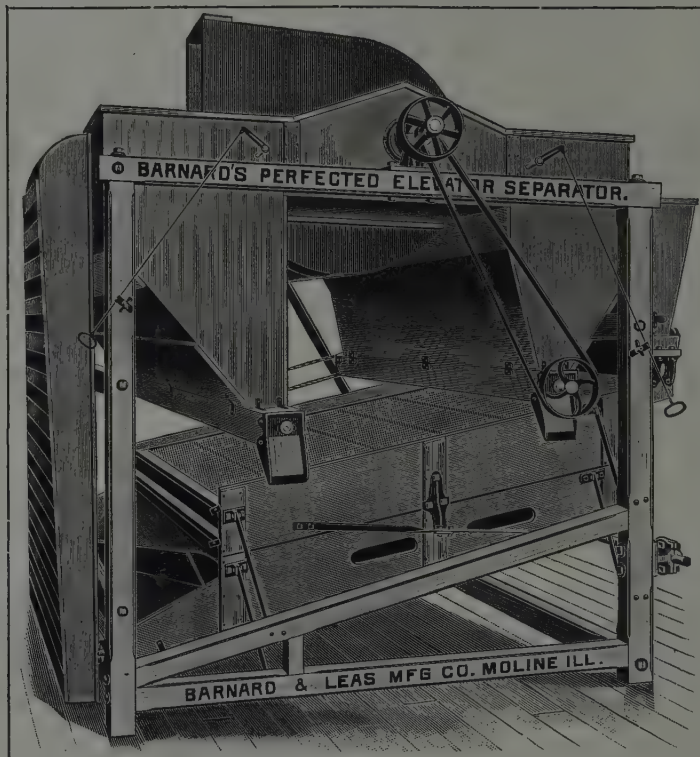
INVINCIBLE NEEDLE SCREEN  
GRAVITY SEPARATOR.

## A Separator That Cleans.

Barnard's Perfected Elevator Separator has no equal for cleaning grain.

The efficiency, both in its sieve and air separations, is not only greater, but it has greater capacity than any machine on the market. The great feature about this machine, however, is the new arrangement of its screenings chambers. These catch and save everything drawn from the wheat.

Give this machine a trial. We guarantee satisfaction. Write to us anyway and we will give other reasons why you should have one of these machines.



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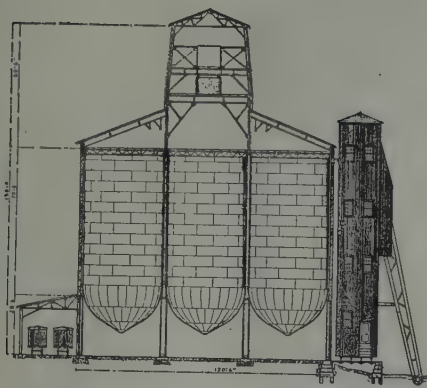
# Riter-Conley Mfg. Co.,

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## Grain Elevators of Steel,

ALSO

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Cross section of Great Northern Elevator furnished by us at Buffalo, N. Y. Three million bushels' capacity. Steel throughout.

Water and Oil Tanks,  
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All Parts of the World.

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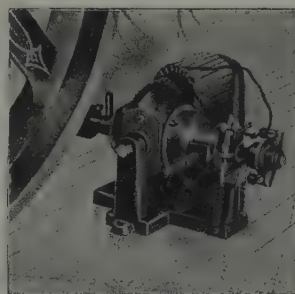
Plate, Tank and Boiler Works, First, Second and Third Aves.

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# THE AUTO-SPARKER



1. Starts and runs gas engines as easily as best batteries.
2. Does not burn up electrodes.
3. Machine is durable, nothing to wear out but shaft and friction pulley and these should last for years.
4. Saves its entire cost over batteries in one year.
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7. You need no battery. Auto-Sparker can be fastened to floor, as in cut, or on body of gas engine or automobile.

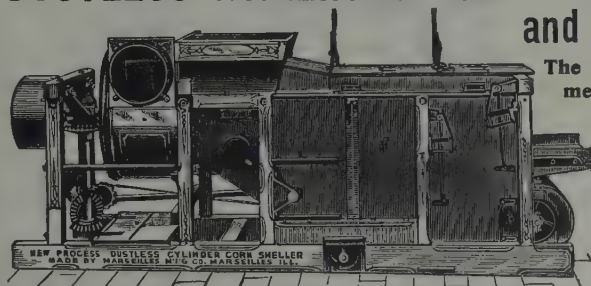
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The Latest Improve-  
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and Cleaners.

Specially built for  
Mills and Eleva-  
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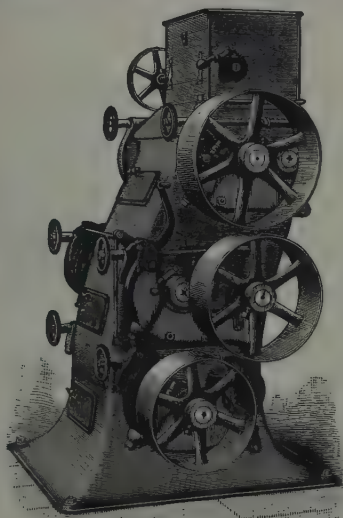
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### A NEW PROCESS OF SHELLING CORN.

Some of the special features are: An Adjustable Cylinder, White Iron Shelling Parts, Spiral Shelling Head, Double Suction and Blast Fans, Positive Screw Feed, no Clogging, no Grinding of Corn, Cobs Left in Good Shape for Fuel, no Waste of Grain or Power.

We make over 100 styles and sizes of Corn Shellers and can meet all demands. Address

MARSEILLES MFG. CO., MARSEILLES, ILL.



3-PAIR-HIGH, SIX-ROLLER MILL.

## CUSTOM WORK!

UTILIZE YOUR POWER  
BY OPERATING A GOOD MILL FOR GRINDING

...FEED AND MEAL...  
— IT PAYS —

WE MANUFACTURE

THREE-ROLL, TWO-BREAK MILLS, 2 Sizes.

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TWO-PAIR HIGH, FOUR-ROLLER MILLS, 5 Sizes,

...And...

PORTABLE FRENCH BUHR MILLS,

85 Sizes and Styles.

SEND FOR BOOK ON MILLS.



VERTICAL  
UNDER RUNNERS,  
UPPER RUNNERS,  
PULLEY AND GEAR DRIVES.

## ELEVATOR SUPPLIES AND POWER CONNECTIONS.

ROPE DRIVES, GEARING, CORN SHELLERS and CLEANERS, GRAIN CLEANERS.

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We manufacture Elevator Cups for all purposes, and make a greater number of sizes than found in any standard list. Our Cups have greater capacity than others of same rated size; for instance, our 3 1/2 x 3 inch, list price 9c., has as much capacity as others 3 1/2 x 3 1/2 inch, list price 10c. Our prices are right

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INDIANAPOLIS, INDIANA, U. S. A.

FLOURING MILL ENGINEERS, IRON FOUNDERS AND MACHINISTS. ESTABLISHED 1851.



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**DODGE**  
PATENT

AMERICAN SYSTEM OF ROPE DRIVING  
FOR ALL KINDS OF MANUFACTURING  
PLANTS, GRAIN ELEVATORS, BREWERIES,  
ETC., DESIGNED, FURNISHED AND ERECTED.

TRADE MARK

OVER A MILLION OF THESE PULLEYS IN DAILY OPERATION.

THE ONLY ORIGINAL BEWARE OF IMITATIONS.

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Electrical Jack Shafts  
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Leading Original Specialties  
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THERE ARE MORE

## Paine-Ellis Grain Driers

In operation on this continent  
than all others combined.... **Why?**

**Because** they are the only machines that will handle with equal facility grain containing 50 per cent moisture to that simply damp and musty.

These machines will operate successfully and rapidly at a temperature as low as 110 degrees. Practical millers and elevator men will appreciate this.

It is one thing to kiln dry and another to put every kernel of grain into its normal condition by Nature's own method. **We can do it.**

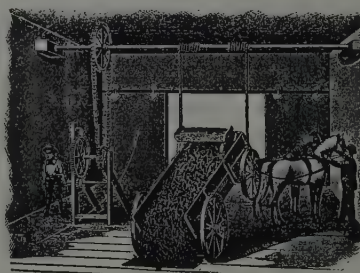
FOR PARTICULARS ADDRESS

### The Paine-Ellis Grain Drier Co.,

53 CHAMBER OF COMMERCE, MILWAUKEE, WIS.

## SMITH'S

### Automatic Warehouse and Elevator Machinery.



I have given the building of Warehouse and Elevator Machinery my special attention for the past thirty years and claim to furnish the most complete, convenient and labor saving machinery that can be constructed, and will furnish plans and specifications on application for a complete automatic warehouse.

The accompanying cut is an exact representation of my

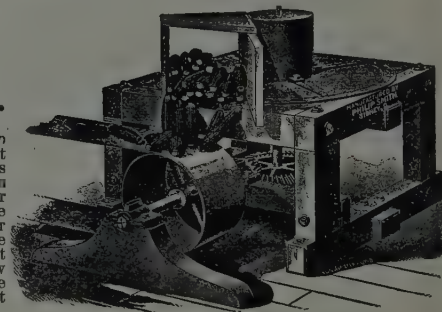
#### Latest Improved Overhead Dump

Which can be operated with ease, safety and speed, and we think that you will find that this dump embodies all the features required, without an objectionable point, and is within the reach of all grain men. This dump can be placed on a level floor, and is so constructed by a double gear that it can be operated by a boy.

#### THE MARQUIS PATENT

### Ear Corn Elevator and Sheller Feeder.

Feeder will feed corn from the dump to the elevator or sheller with or without drag belt. Will feed 100 to 1,500 bushels per hour without any attention. Can be regulated to the capacity of the sheller or elevator while in operation. Can be made to feed either sheller or elevator by changing reverse board. It is made of iron and is very durable. It will last a lifetime. Can be applied to dump now in use at very little expense. We have over 5,000 of these machines in use that are giving universal satisfaction. Prices furnished on application.



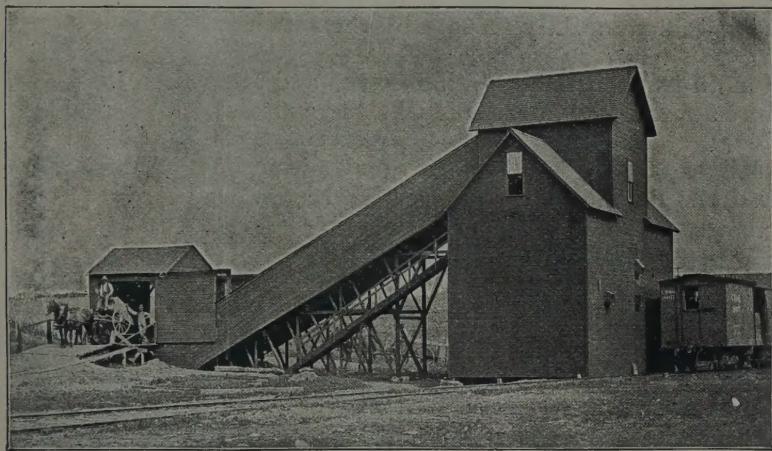
Agents Wanted to Sell Our Full Line of Corn  
and Elevator Machinery.

### PHILIP SMITH, Sidney, Ohio.



# THE INCLINE ELEVATOR and DUMP

SOLVES THE PROBLEM OF CRIBBING EAR CORN WITHOUT SHOVELING.



It attracts the most profitable part of the grain business. The Ventilated and Combination Grain Bin is excellent ear corn storage, is rat proof and a light bin for anything. It requires only 1/4 foot of lumber per bushel of storage. The reduction in cost of storage compared with even a common, temporary ear corn crib will pay for the Incline Elevator and Dump to fill it.

Dealers having belt elevators would profit by adding our ear corn, oats, wheat, etc., storing facilities. Extensive farmers and feeders would also find improvement and profit by adopting it. Each team elevates the load it brings. Power is always ready and costs you nothing. Will elevate 20 or more of the largest loads per hour.

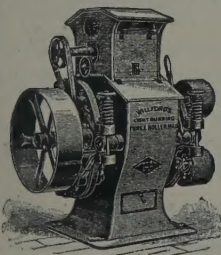
**Our Plan for Dealers' Complete Elevator Plants.** Less than one-half the investment and one-third the expense of operating an ordinary elevator. Unexcelled for speed, convenience and economy of handling shelled grain and also ear corn for shelling or cribbing purposes. It successfully competes with belt elevators. Plenty of capacity is provided in the hopper bottom shipping bins (which are of the right height to spout direct into cars) for grain purchased for shipment, while ear corn, oats, wheat, etc., are stored in the combination bin below.

\$3,500 will complete a 100,000-bushel plant having twenty 1,000-bushel shipping bins, chute direct from top of building and a number of combination bins with total capacity of 80,000 bushels of small grain or 40,000 bushels of ear corn. Gravity or power cleaners, conveyors, sheller, engine, etc., may be added.

The Incline Elevator and Dump and plan of building have been greatly improved and are covered by U. S. patents. Write for prices and catalog. Come and see.

**H. KURTZ & SON, SAC CITY, IOWA.**

## Willford's Light-Running Three-Roller Mills



SOON PAY FOR THEMSELVES  
IN ELEVATORS.....

Because they grind the most feed for the power consumed of any feed mill made; are simple, solid and durable and require very little attention.

Send for Circulars and Prices.

**WILLFORD MANUFACTURING CO.,**  
NO. 303 SOUTH 3rd STREET, MINNEAPOLIS, MINN.

## THE CELEBRATED A. P. DICKEY GIANT GRAIN CLEANERS.

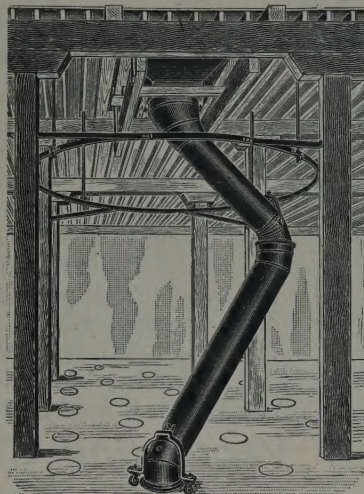
Over-Blast Suction Separator.

THE  
STANDARD  
IN THEIR  
LINE.

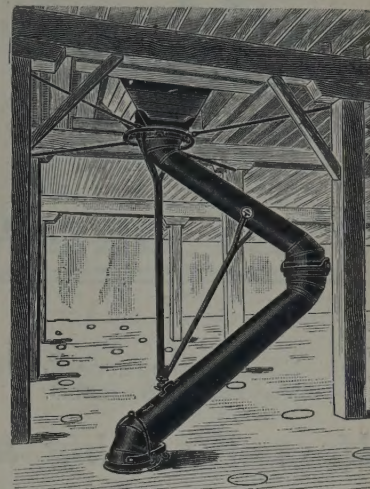
"Grain  
Cleaned  
to a  
Standstill."

Manufactured in any desired size and pattern, with capacities to accommodate the largest Elevator and Flouring Mills, or small Warehouses for hand use. Single and Double, End and Side Shake, and Dustless Separators, both Under and Over Blast.

Address..... **DICKEY MFG. CO., RACINE, WIS.**



TROLLEY SPOUT.



STANDARD SPOUT.

## D. A. ROBINSON'S Universal Distributing Spouts,

755-765 TEMPLE COURT, MINNEAPOLIS, MINN.

**75  
CENTS.**

**MAKE MONEY! INVEST \$75 OR \$150.**

**A SHARE WILL SOON BE WORTH \$5.00 SURE.**

You cannot do better than to invest in some of this stock. The company owns very valuable copper properties, which have been opened and developed enough to show extensive and rich deposits of copper. Write for prospectus. The stock is selling at 75 cents a share. Will soon be advanced to \$1.

**COLONIAL COPPER CO., 153 Milk Street, Boston.**



Patented Dec. 7, 1897.

### Dust Protector.

The "Perfection" with Automatic Valve compels perfect protection and ventilation. Improved and Enlarged. Thousands in use. Nickel plated protector postpaid, \$1.50. Cir. Free. Agents wanted.

**H. S. COVER,**  
SOUTH BEND, IND.

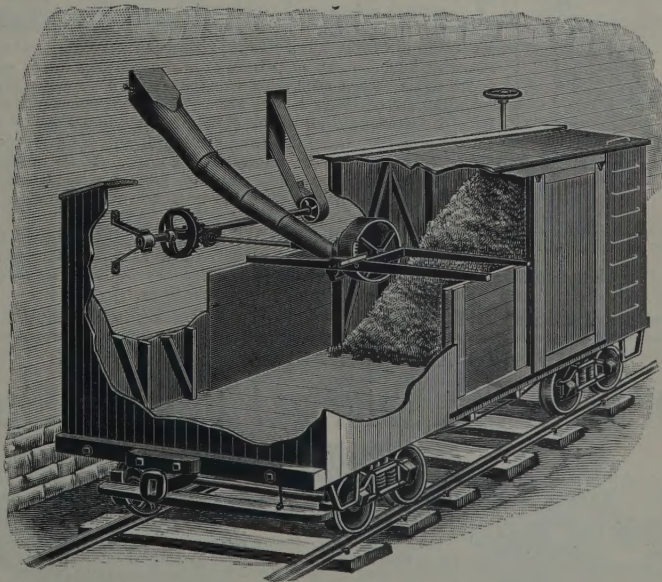
For a good sale, prompt and fair returns for

### Wool and Sheep Pelts

Write to

**P. C. PORTER,**  
129 Kinzie St., CHICAGO ILL.

## THE STERLING CAR LOADER



MANUFACTURED BY

**E. H. REYNOLDS, STERLING, ILL.**

WRITE FOR PRICES AND FULL PARTICULARS.



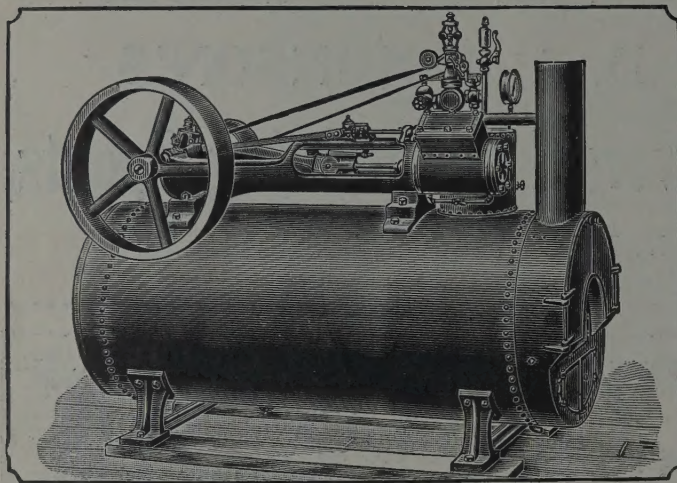
# The...Hess Pneumatic Grain Drier

IS THE  
**ONLY DRIER**

P. S.—No wire netting nor perforated metal used in the HESS.

1. In which the grain is all in sight and "get-at-able" while drying and cooling.
2. In which drying and cooling are simultaneous and continuous.
3. In which the grain may be mixed and stirred while drying without using power, by simply throwing a lever.
4. Which can be emptied and filled in sixty seconds by the watch and without stopping the blower.
5. In which the heat given off by the cooling grain is saved and utilized.
6. In which all parts are removable and interchangeable, a small wrench only being necessary.
7. Which has been officially approved by the Chicago Underwriters' Association and by the Underwriters' Bureau of Fire Protection Engineering.
8. Which is used by the largest grain interests in the world.

**Hess Warming and Ventilating Co., 708 Tacoma Building, Chicago.**



## THE LEFFEL ENGINES

Furnished in a variety of  
Sizes and Styles, afford

**BEST POWER FOR ELEVATORS.**

### BECAUSE—

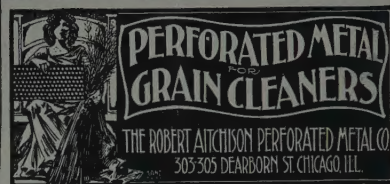
They do not take "bucking" spells, are thoroughly reliable and can be depended on to furnish steady and strong power when wanted.

Less trouble and expense to keep in running order.

Economical in running expenses, waste coals furnishing more than enough fuel.

More durable than any other power. Pamphlet with prices and further information desired on application, stating size power wanted.

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### DUST! DUST!



Gibbs' Patent Dust Protector is invaluable to operatives in every industry where dust is troublesome. It has been thoroughly tested for many years in every kind of dust and is the only reliable protector known. Perfect ventilation. Nickel plated Protector \$1, postpaid. Circulars free. Agents wanted.

**Gibbs Respirator Co.,**  
30-36 La Salle Street, - CHICAGO

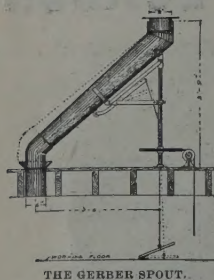
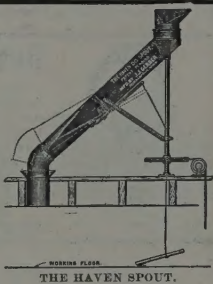
Read the "For Sale" ads, in this paper if you want to buy. Advertise there next month if you have anything to sell.

## The HAVEN Grain Distributing Spout AND ...

## The GERBER Improved Distributing Spout

MANUFACTURED BY

**J. J. Gerber Sheet Metal Works, 128 Sixth Ave. South, MINNEAPOLIS, MINN.**



**THE HAVEN GRAIN DISTRIBUTING SPOUT** for country elevators is designed to prevent the mixing of grain in the elevator while being transferred from the elevator pit to the different bins. It is built with pivoted rectangular lower end section, as shown in cut, allowing the lower end of spout to be raised completely out of funnel or spout leading from the cupola floor to the bins. The operator pulls a cord from the working floor of the elevator and swings the spout to the desired bin, and the lower section of the spout drops into the proper opening by releasing the cord. It is constructed with heavy cast-iron hopper at top, having a heavy cast-iron elbow at top and bottom. The balance of the spout is built from heavy sheet steel.

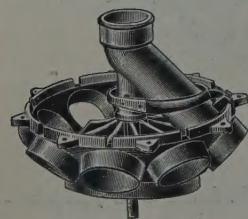
**THE GERBER SPOUT** is operated by pressing a foot lever to the floor; is substantially built, and is giving satisfaction in a large number of houses as a serviceable spout.

We also furnish mill and elevator spouting of all descriptions.

Agents: Link-Belt Supply Co., Fairbanks, Morse & Co., C. D. Holbrook & Co., Minneapolis, Minn.

ESPECIALLY ADAPTED FOR HANDLING FLAX.

## Hall Grain Distributor and Overflow Signal



**ABSOLUTELY PREVENTS MIXING GRAIN** during process of distribution between turnspout and bins. Locks automatically. Accurate. Positive. Perfect.

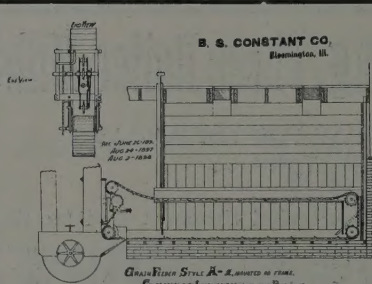
**AUTOMATICALLY NOTIFIES OPERATOR WHEN BIN IS FULL,**

Time approaches for elevator repairs. Book your order early. Don't attempt to handle another harvest with the sloppy, wasteful grain-mixing turnspout, which at best is but an improvised affair. Use an up-to-date mechanical device that often saves its cost in one day. Send for booklet to

**HALL DISTRIBUTOR CO.,**

Patented April 17, 1900.

222 First National Bank Bldg., OMAHA, NEB.



## The B. S. Constant Grain Feed STYLE A-2.

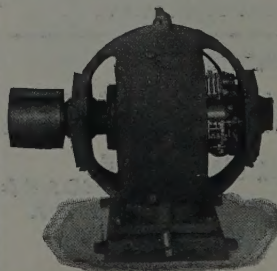
In building or remodeling be sure also to get prices on Constant's Grain Cleaning and Elevator Machinery.

**COMPLETE GRAIN ELEVATOR  
OUTFITS FURNISHED.**

**B. S. CONSTANT CO., BUILDERS OF GRAIN ELEVATORS, BLOOMINGTON, ILL.**

## Roth Dynamos for Grain Elevator Lighting.

**Motors for Power Service.**



Dynamos suitable for lighting roller mills, 15 lights to 110 lights, 16 c. p. The best, cheapest and safest kind of lighting. First-class machines, requiring very little attention and fully guaranteed. Complete plants furnished with full instructions for setting up and operating. Send for descriptive bulletin No. 106 and prices.

**ROTH BROS. & CO.,**  
MANUFACTURERS,

88-92 W. Jackson St., - CHICAGO, ILL.

## LINK-BELT SUPPLY CO.

MINNEAPOLIS, MINN.

We keep in Stock for quick delivery. . . .

**Link Belting,  
Sprockets,  
Buckets,  
Spiral Conveyors,  
Rubber Belting,**

**Pulleys,  
Shafting,  
Boxes, Collars,  
Piping and Fittings,  
Packing.**

## GASOLINE AND STEAM ENGINES.



## Patent Stretched Elevator Belting.

Write  
For  
Prices.



Will  
Give You  
Prompt  
Attention.

**THE GUTTA PERCHA & RUBBER MFG. CO.,**

96 and 98 Lake Street, Chicago.

## CORN BELT EAR CORN GRINDER



Grinds Ear Corn and all Small Grain  
Into Good Stock Feed.

It is the only machine that grinds ear corn satisfactorily with light power, such as is usually available in grain elevators.

Guaranteed to grind more ear corn per horse power than any grinder made. Notice construction of grinding parts. Cuts the cob instead of crushing. This saves power and grinds the cob as fine as the corn. Runs at low speed, from 50 to 300 revolutions per minute, according to power. This saves power and does not heat the grain or the boxes.

The parts exposed to wear can be removed and replaced with very little trouble or expense. This is an important feature.

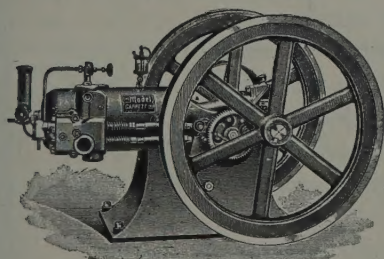
The Corn Belt is a winner and up-to-date in every respect, and you ought to see it grind.

For particulars write to

**SPARTAN MFG. CO.,**  
**AURORA, ILL.**

Mention the GRAIN TRADE.

## The MODEL GAS AND GASOLINE ENGINE.



Unexcelled in

Simplicity, Durability, Economy,  
and Reliability.

It always pays to buy the best, the simplest and the one that costs the least to operate and keep in repair.

Write for catalog and guarantee on fuel.

**GARRETT GAS ENGINE CO., Garrett, Ind.**

**THE OLD WAY.**



**For NEW and BEST Way**

**ADDRESS**  
**UNION IRON WORKS,**

**DECATUR, ILL.,**

Manufacturers of the CELEBRATED

**Western Shellers and Cleaners**

The "Best in the World."

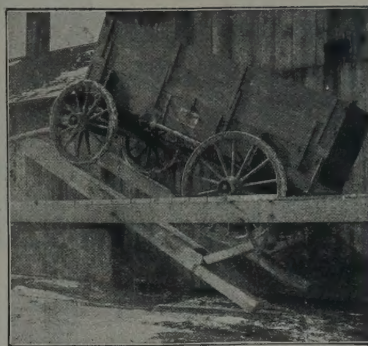
**Elevator Supplies of All Kinds a Specialty.**

We are the Pioneer Elevator Builders of the West, and claim priority in the building of Cheap Elevators with Increased Conveniences. Don't BUILD until you get our Plans and Prices. Write for Catalogue.

## The Adjustable Elevator Dump.

**GUARANTEED**

**THE BEST ON THE MARKET.**



LOW-WHEEL WAGON ON DUMP.

When you want a dump that is guaranteed to do all that is claimed in the foregoing, and which is giving entire satisfaction to all concerned wherever used, write us for descriptive circular, testimonials, guarantee and price list.

WE claim superiority over all others in giving all wagons the proper pitch, in letting them down easy and drawing them from the dump with less power. They occupy less space, are simpler in construction, more durable, easier to attach and require less attention than any other dump. To responsible firms the attachment will be sent on 30 days' trial.

PARIS, ILL., NOV. 29, 1899.  
MESSRS. SIMS BROS., City.

Gentlemen:—We have one of your Wagon Dumps in operation at our elevator and are much pleased with it. We believe it is just what all elevators, and all who want the best dump on the market, are in need of. We heartily recommend it as easy to operate, easy on the wagon and just what the farmers will like.

Yours truly,  
AUGUSTUS, RUDY & Co.

**SIMS BROS.,** MANUFACTURERS AND PATENTEES, **PARIS, ILL.**

**DAMP WHEAT can be PUT in CONDITION for GRINDING or STORAGE**

By using our

**STEAM DRYER,**

Which is also a successful  
Wheat Heater or Temperer  
or Dryer for Washed  
Wheat or Bran.

It leaves the Wheat in Perfect Condition for the Rolls. Will also dry Malster's, Brewer's and Distiller's Wet Grain.

Not an Experiment. In successful use 25 years drying

**CORN MEAL AND HOMINY,**  
**BREWERS' GELTS AND MEAL,**  
**BUCKWHEAT, RICE AND**  
**ALL CEREAL PRODUCTS.**

**ALSO SAND, COAL DUST, GRAPHITE AND CLAY AND ORE OF ALL KINDS!**

Automatic in operation, requiring no attention. Double the capacity of any other Dryer sold for same price.

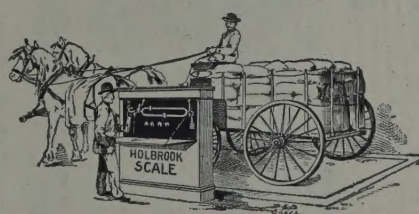
**THE CUTLER CO., North Wilbraham, Mass.**

## Grain Elevator Machinery and Supplies.

Wagon, Hopper, Portable and  
Dump Scales.

Gas and Gasoline Engines of all sizes. Carry full stocks and can furnish you complete elevator equipment on short notice.

**C. D. Holbrook & Co.,**  
305-307 Third St. S. Minneapolis, Minn.

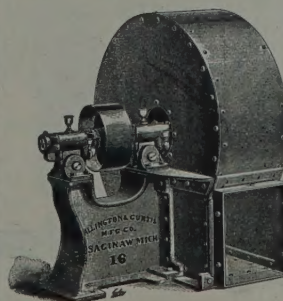


**Fans and Dust Collecting Systems**

**FOR**

**Elevators.**

COLLECT YOUR DUST AND SAVE EXPLOSIONS.



**The Allington & Curtis Mfg. Co.**  
**SACINAW, MICH.**



# 1900's Prize Order



In April we received it—1900's prize order.  
It came without solicitation. It came without competition.

It came without puff, pull or parley.

It came as naturally as a needle flies to the magnet.

It came because there is no Grain Cleaning Machinery in the world that can beat the Monitor machines.

The order was for forty of our largest Monitor Cleaners, including our Monitor Warehouse Separators and Monitor Warehouse Clippers.

This order is to equip the model cleaning house of the largest elevator in the world.

There is a moral in this order, a moral that every elevator or milling man should ponder over.

What grain cleaning machinery house can point to such an instance of superlative confidence in its product?

There are reasons for it, however.

When other concerns were cutting down the quality of materials during the recent hard times, we maintained our standard, "ahead of all others," even though expenses "cut to the quick."

While others cut prices to meet the cut in quality, we kept our prices up to our quality.

While others "rested on their oars," we kept on adding improvements in type and construction.

Our faith has been justified.

Three-fourths of the large cleaning houses that have been erected in the United States in the past five years have been fully equipped with Monitor machines.

Never before in our history were we compelled to start night work in the middle of April, as we had to do this year.

It is this moral rightness of quality and our rightness of price, that has made it the most natural thing in the world that 1900's prize order should have come to us without puff, pull or parley.

*Let us send you some interesting literature.*

*Let us talk to you about the **Monitor.***

**HUNTLEY MANUFACTURING CO.,  
SILVER CREEK, N. Y.**